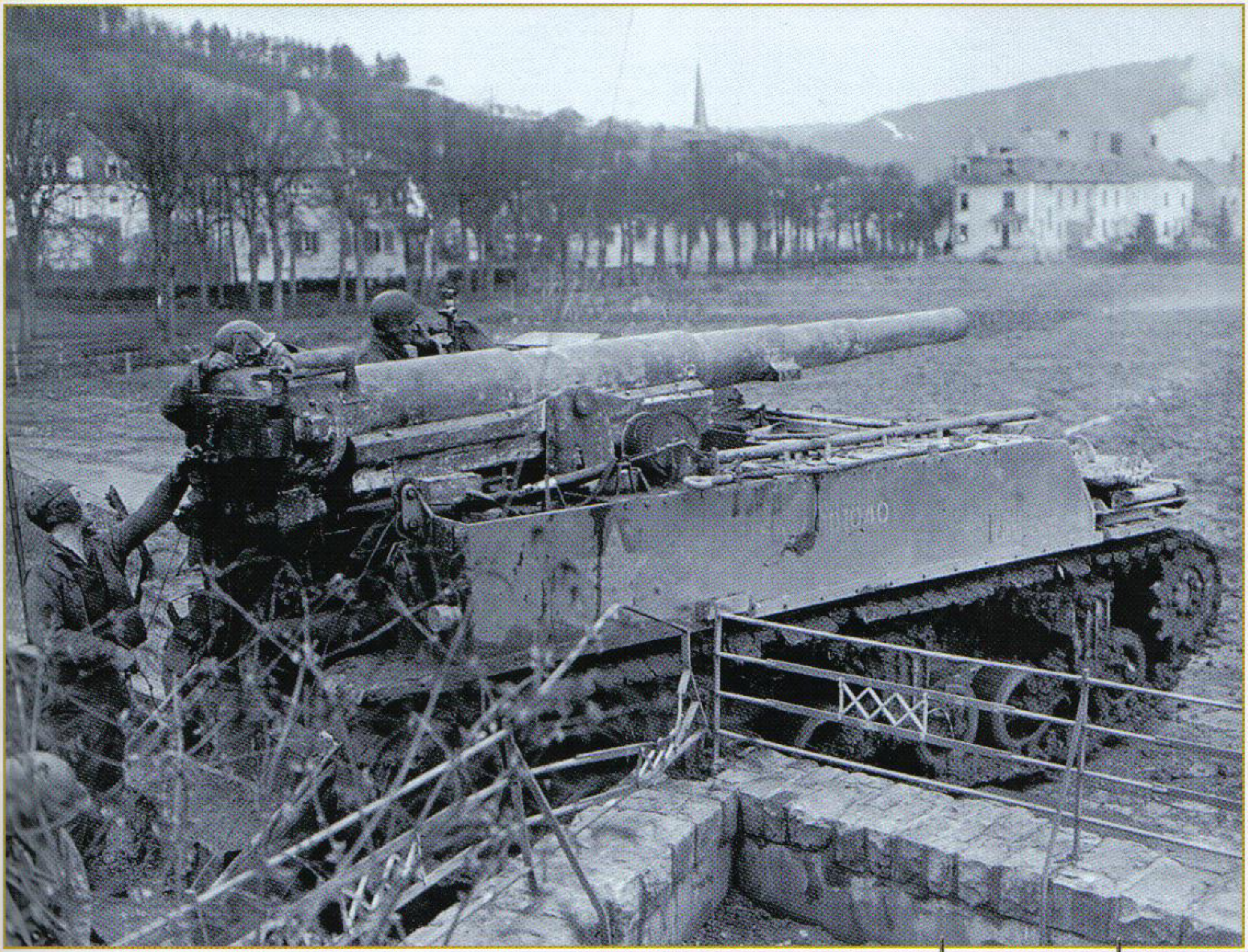
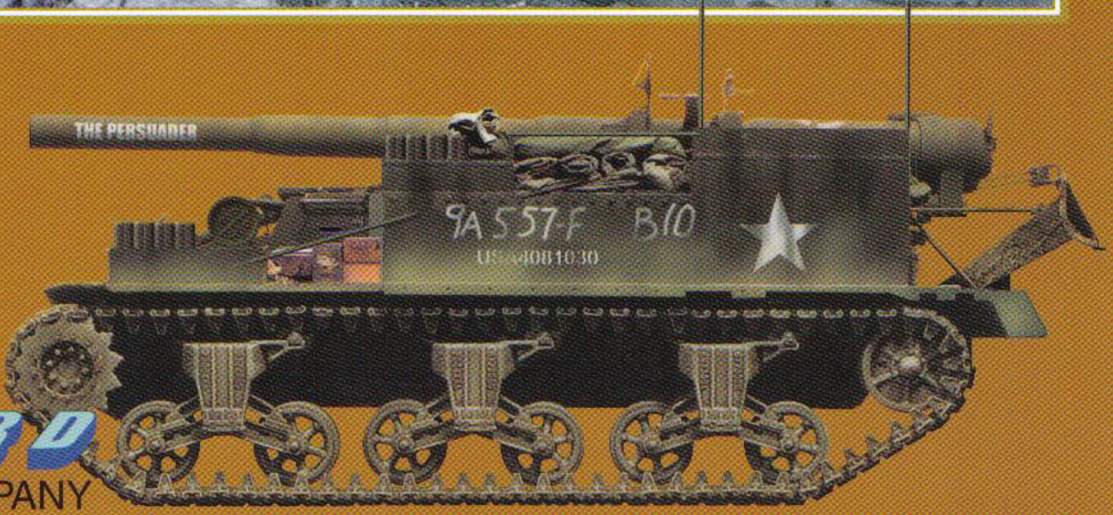
ARMOR AT WAR SERIES

7044

US Armored Artillery in World War II

Steven J. Zaloga




THE PERSUADER
9A 557-F B10
US 4081030

CONCORD
PUBLICATIONS COMPANY

7044

US Armored Artillery in World War II

Text and color plates by Steven Zaloga

Copyright © 2002
by CONCORD PUBLICATIONS CO.
603-609 Castle Peak Road
Kong Nam Industrial Building
10/F, B1, Tsuen Wan
New Territories, Hong Kong
www.concord-publications.com

All rights reserved. No part of
this publication may be reproduced,
stored in a retrieval system or
transmitted in any form or by any
means, electronic, mechanical,
photocopying or otherwise, without
the prior written permission of
Concord Publications Co.

We welcome authors who can help
expand our range of books. If you
would like to submit material,
please feel free to contact us.

We are always on the look-out for new,
unpublished photos for this series.
If you have photos or slides or
information you feel may be useful to
future volumes, please send them to us
for possible future publication.
Full photo credits will be given upon
publication.

ISBN 962-361-688-0
printed in Hong Kong

Introduction

The United States Army began World War II with no armored field artillery vehicles in service. With the formation of the Armored Force in 1940 after the fall of France, there was an immediate need for artillery vehicles to accompany the tank units to provide indirect fire support. Since it would take some time to develop such vehicles, the Ordnance department decided to manufacture two expedient types which could be fielded quickly. These were the T30 75mm howitzer motor carriage (HMC) and the T19 105mm HMC, both based on the standard M3 halftrack. Production of the T19 105mm HMC began in January 1942 and 324 were built; T30 production began in February 1942 and 500 were completed. The T19 was mainly used in armored field artillery battalions in the armored divisions. The T30 75mm HMC were intended for use as assault guns and were deployed in the armored divisions' reconnaissance battalions. Infantry divisions in North Africa deployed a cannon company in each of their three regiments with six T30 75mm HMC and two T19 105mm HMC. The Army regarded both the T19 and T30 as marginally satisfactory and began replacing them as soon as newer and more suitable vehicles became available. The T19 was replaced by the new M7 105mm HMC beginning in the campaign in Sicily in the summer of 1943, though a handful of T19 were still in use in Italy and southern France a year later. The T30 remained standard through the Sicily campaign and during the Salerno operation, but began to be replaced by the M8 75mm HMC in the summer of 1943 due to the late production start of the M8 75mm HMC. Some T30 remained in use in Italy until the summer of 1944.

The M7 105mm HMC was by far the most numerous and important armored artillery vehicles in US Army service in World War II. It consisted of a standard M2 105mm howitzer mounted on a M3 medium tank chassis. Production began in April 1942 and continued until the end of the war with 3,441 of the basic M7 105mm HMC completed. Due to its long production run, the M7 underwent continuous modification and improvement gradually incorporating features from the newer M4 medium tank. The initial production vehicles were based on a modified M3 medium tank chassis so were fitted with the same three-piece transmission cover on the bow, complete with the small cut-out on the right side intended for the M3 tank's 75mm sponson gun. By the summer of 1942, this was replaced with the type found on the M4 medium tank which had symmetric final drive covers on either side without the right side cut-out seen on the initial production vehicles. In May 1942, the internal layout was amended to increase the number of ready rounds in the fighting compartment which required the deletion of two of the six crew seats. Other changes at the time included a redesign of the sponson stowage boxes, deleting the hinged side panel.

Due to production pressures, vehicles manufactured in the late spring of 1942 could be fitted with either the three-piece Iowa transmission or the newer Caterpillar one piece transmission. Vehicles with the one piece Caterpillar transmission had the corresponding one-piece E4188 cover. There were problems with the new transmission causing propeller shaft failures, and in conjunction with the greater demand for these transmissions for M4 tanks, the Caterpillar transmission became less common in late 1942 M7 production, and was seldom seen on vehicles manufactured in 1943 with the three-piece Iowa transmission and the related transmission cover becoming predominant.

Combat use of the M7 on Sicily revealed that the ready ammunition racks on the hull side were not adequately protected. As a temporary expedient, units in the Mediterranean theater were authorized to weld additional armored plate along the side to cover the ready racks. In the meantime, a set of folding armor panels were developed to cover the sides and rear of the fighting compartment. These were introduced into the production run in October-December 1942, and were later retrofitted to some unmodified vehicles at depots in the United States before being issued to troops. The pulpit machine gun mount on the right side of the vehicle was modified by extending the sides down to permit the gunner to sit in the bay, and this feature was incorporated into intermediate production vehicles by January 1943.

The M7 gradually absorbed changes being developed for the M4 medium tank series. With the adoption of the new D47527 heavy duty bogie assemblies on the tank in 1942, these gradually replaced the older D37893 style with the center-mounted return roller from the M3 medium tank. These new bogies assemblies began to appear sporadically around December 1942. M7 production was temporarily brought to a close in August 1943 after 2,814 vehicles had been completed. However, revised tables of organization increased the requirement for these vehicles and production resumed in March 1944. At this time, the M7 design was significantly revised to incorporate improvements from the M4 medium tank. These vehicles are distinctive as they had the new one-piece E8546 transmission cover, revised stowage, modified sponson stowage boxes with a basket added to the top, and the heavy duty bogie was adopted as standard. Since the M4A3 was the preferred version of the M4 for US Army use, parallel production began of the M7B1 105mm HMC which was nearly identical to the late production M7 except for the different engine and rear hull configuration. A total of 826 M7B1 were manufactured through February 1945.

The primary role for the M7 105mm HMC was in the armored field artillery battalions (AFAB). These battalions each had eighteen M7 105mm HMC. They were intended primarily for the armored divisions, each of which had three such battalions under the revised 1943 tables of organization. However, as the war progressed, the value of self-propelled artillery became more greatly appreciated by the artillery branch, and an increasing number of towed 105mm battalions were converted to self-propelled battalions as the more M7 became available. Some infantry regiments had a cannon company with six M7 105mm HMC, though the general practice was to equip these with towed 105mm howitzers. During 1943 and early 1944, some tank battalions in Italy used M7 105mm HMC as expedient assault guns until the turreted M4 (105mm) assault guns became available. The Marine Corps began to replace the M3 75mm GMC in their special weapons companies with the M7 in early 1945 and they saw service in later campaigns including Okinawa.

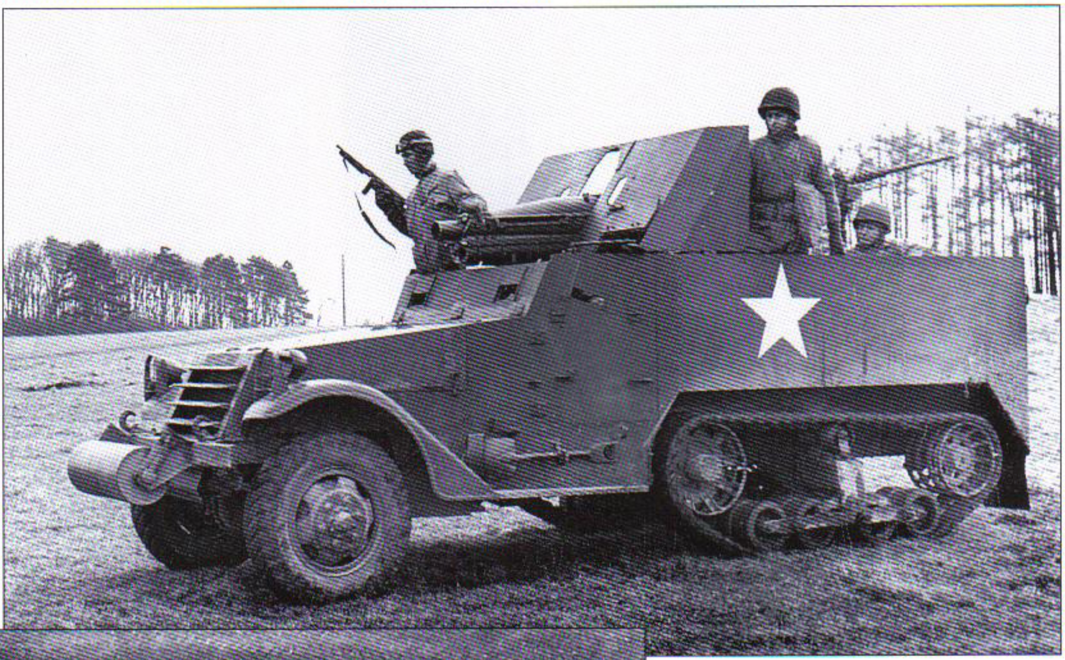
Over a quarter of M7 production was transferred to allied armies under the Lend Lease program. Britain was the first recipient, and in fact M7 HMCs were first used in combat with British units at the second battle of El Alamein in the summer of 1942. Britain was the largest recipient of the M7 105mm HMC with 832 delivered. They were nicknamed the "Priest" in British service due to their machine gun "pulpit". Although used extensively in North Africa and in the early Italian campaign, the Priest began to fade from British service later in 1943 due to a decision to standardize on a self-propelled version of the 25 pdr. built in Canada, the Sexton. The Sexton, was based on the Canadian Ram tank chassis, itself derived from the M3/M4 medium tank series. Some Commonwealth units continued to use the Priest into 1944, though like the British army, they began to gradually standardize on the 25 pdr. as their common field artillery weapon. Some Priests in northwest Europe were converted into improvised Kangaroo infantry carriers. The last extensive use of the Priest in Commonwealth formations was in Burma in 1945. The only other major recipient of the M7 105mm HMC through Lend Lease was France which received 283 directly through Lend-Lease plus additional vehicles through US 6th Army Group supply channels to make up for combat attrition. These were widely used by the French 2nd Armored Division and the First French Army in northwest Europe in 1944-45.

The M8 75mm HMC consisted of a short 75mm howitzer mounted in a turret on a M5 light tank chassis. It entered production in September 1942 and 1,778 were built when production ended in January 1944. By the time it entered service, the US Army was switching to the 105mm howitzer as its standard field artillery weapon. As a result, the role for the M8 75mm HMC shifted compared to its predecessor, the T30 75mm HMC. It was primarily used to provide fire support for armored cavalry reconnaissance squadrons, with each non-divisional squadron having six, and each squadron in armored divisions having eight. There were some other uses of M8 75mm HMC, including some use by some infantry regimental cannon companies in the Pacific theater, and their use as assault guns in the headquarters companies of the small number of light tank battalions still deployed. The only army to receive the M8 75mm HMC under Lend Lease was France. A total of 174 were delivered plus some attrition replacements from 6th Army Group stocks. As in the US case, they were used primarily by cavalry reconnaissance units, but also in support companies which paralleled US cannon companies.

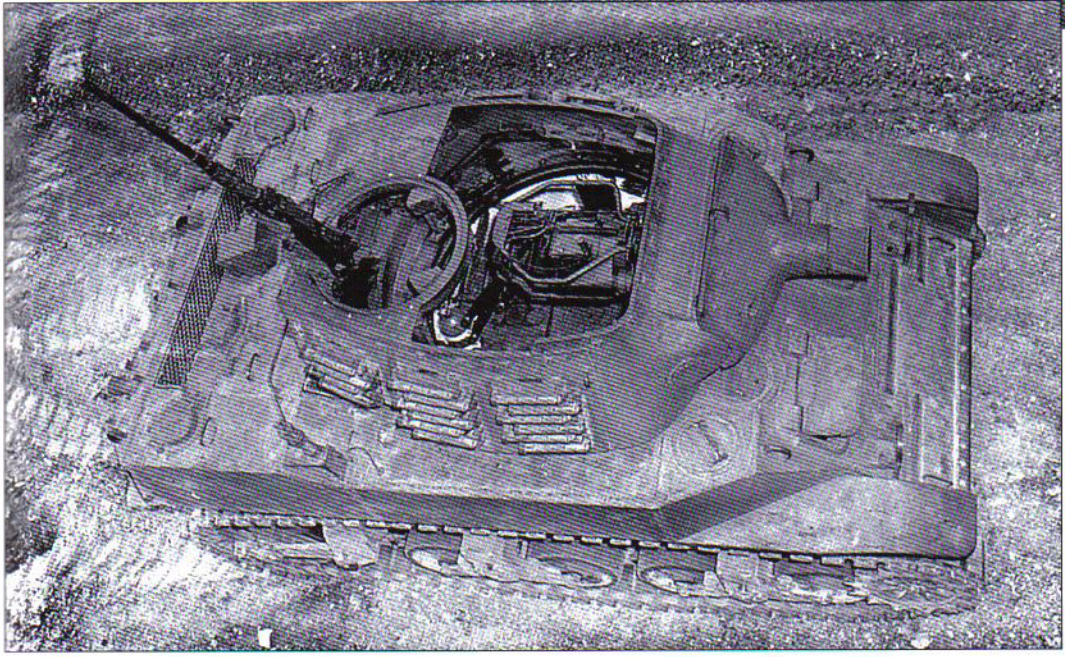
By far the rarest US self-propelled artillery vehicles of World War II were the heavy gun motor carriages using 155mm guns. Since there were no 155mm guns allotted to armored divisions, there was little pressure to field a heavy 155mm GMC. The field artillery branch had little interest in such vehicles and preferred towed guns. Ordnance managed to convince the Army Ground Forces to permit the construction of a hundred M12 155mm GMC in late 1942 and early 1943, which consisted of World War I French 155mm GPF guns mounted on a modified M3 medium tank chassis. Since the large gun allowed only a few rounds of ammunition to be carried on the vehicle, a companion M30 cargo carrier was built in parallel to supply the M12 155mm GMC with ammunition. Both types remained orphans for many months with no requirement from either the armor or artillery branches. Finally, in late 1943, the headquarters of the European Theater of Operations-US Army (ETOUSA) decided that they would need a small number to help in bunker busting along the German Siegfried line. As a result, 74 M12 and 81 M30 were rebuilt in February 1944 and issued to six field artillery battalions. They were first deployed in Normandy and soon became extremely popular weapons for attacking German fortified positions. However, due to the small number built, the number in service declined and so only four battalions were still in service in 1945.

Three new self-propelled guns were on the verge of production at the end of the war. The T83 155mm GMC and the related T89 8 inch HMC were a new heavy field artillery weapon built on an enlarged M4A3 tank chassis. They were nearly identical except for their barrels. Production of the T83 began in February 1945 and about 170 were finished by the end of the war in Europe. A single T83 and the pilot of the T89 were shipped for trials in Europe and saw service with the 991st Field Artillery Battalion in the spring of 1945. The T83 was standardized later as the M40 155mm GMC and the T89 as the M43 8-inch HMC, and they saw service later in Korea. A replacement for the M7 105mm HMC was under development, based on the new M24 light tank chassis. This was eventually accepted for production as the M37 105mm HMC but none were ready in time for combat in World War II. The army also decided to build a self-propelled version of the standard M1 155mm howitzer on the M24 tank chassis. But the M41 155mm HMC did not enter service until after the war, first seeing combat in Korea. Photo coverage of these vehicle in Korea can be found in the companion volume in this series on tank warfare in Korea.

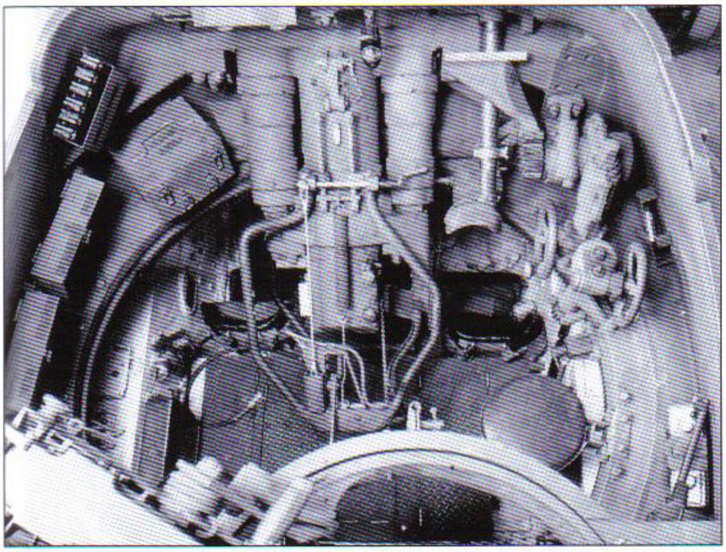
The photos in this book are all official US Army Signal Corps photos unless otherwise noted.



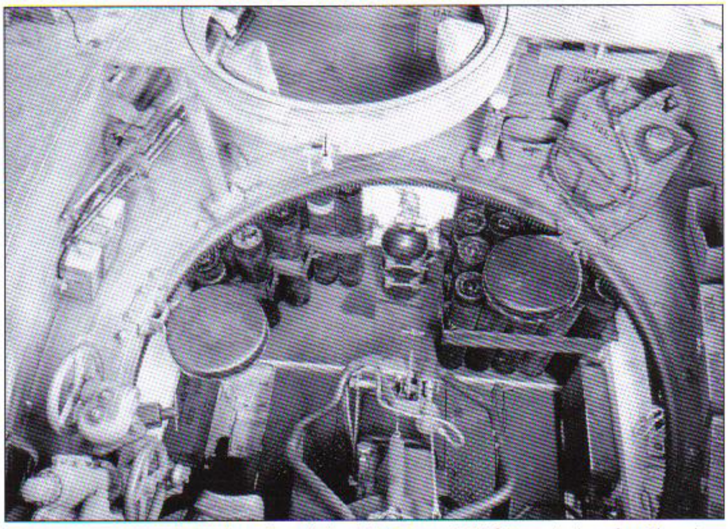
The T30 75mm HMC remained in service through 1943 for training purposes like this example in England on 13 March 1943. By the time of the D-Day invasion, they had been completely replaced by the M8 75mm HMC.



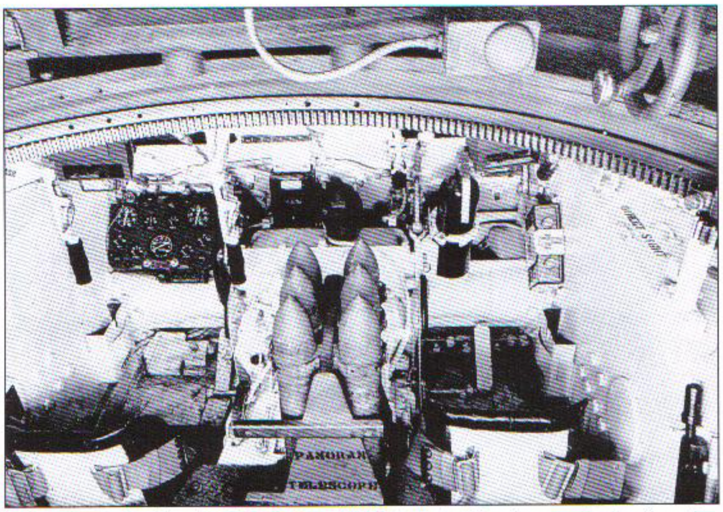
A useful overhead view of a M8 75mm HMC showing the basic configuration. The hull was similar to that of the M5A1 light tank except that the larger turret necessitated the deletion of the hull roof hatches, and the addition of two hatches on the glacis plate instead.



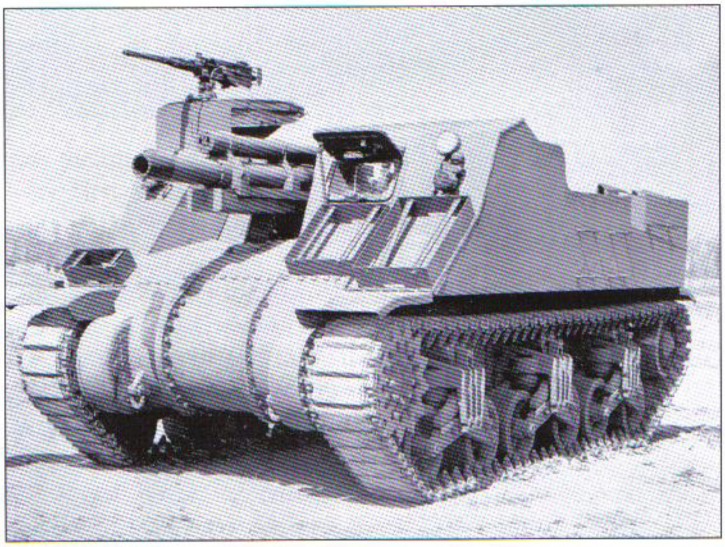
A good interior view of the M8 75mm HMC turret showing the 75mm howitzer and the gunner's fire controls on the right side of the turret.



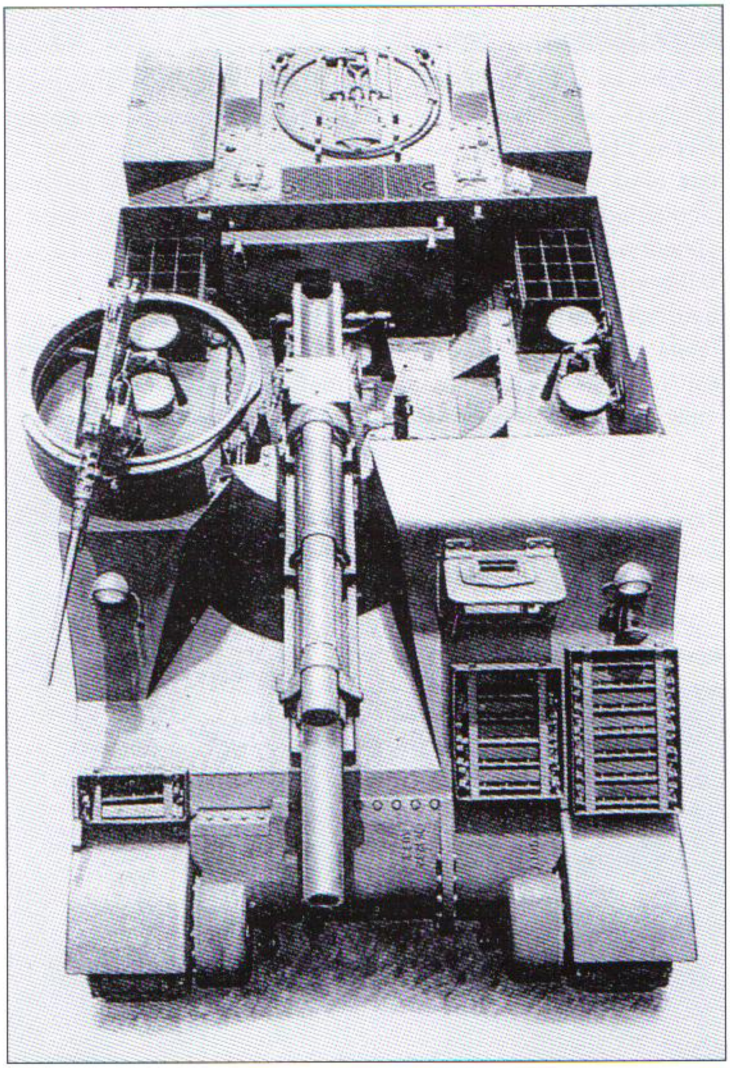
A rear view of the interior of the M8 75mm HMC turret showing the ring mount for the vehicle's .50 cal heavy machine gun, as well as the standard ammunition stowage, and the placement of the crew's M1 carbines.



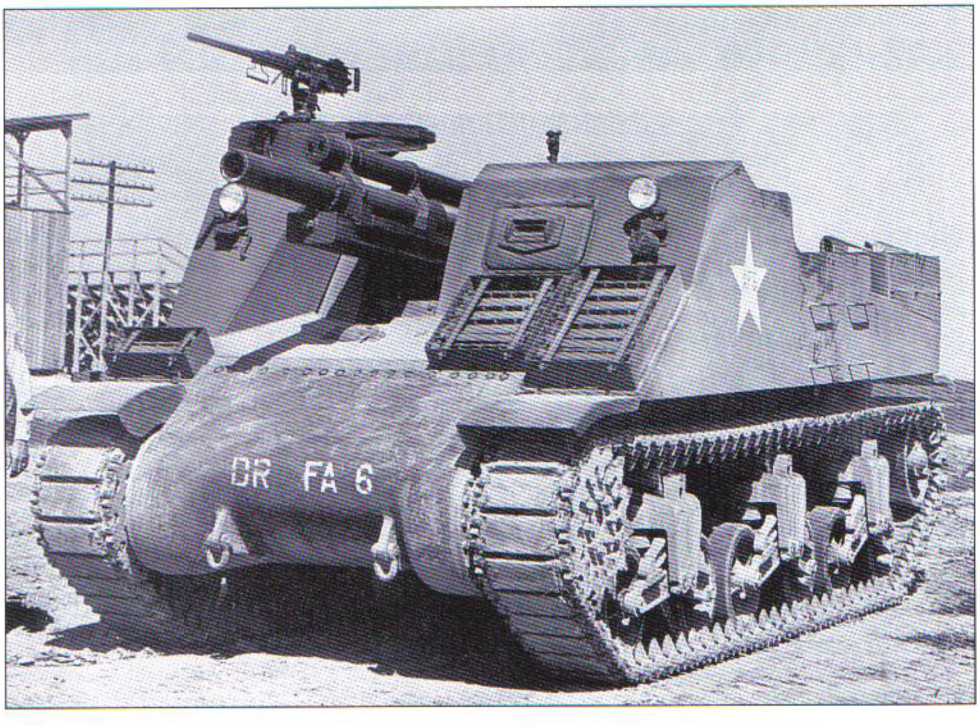
A view inside the M8 75mm HMC hull looking forward, showing the location of the six ready rounds under the gun as well as the driver and assistant drive stations.



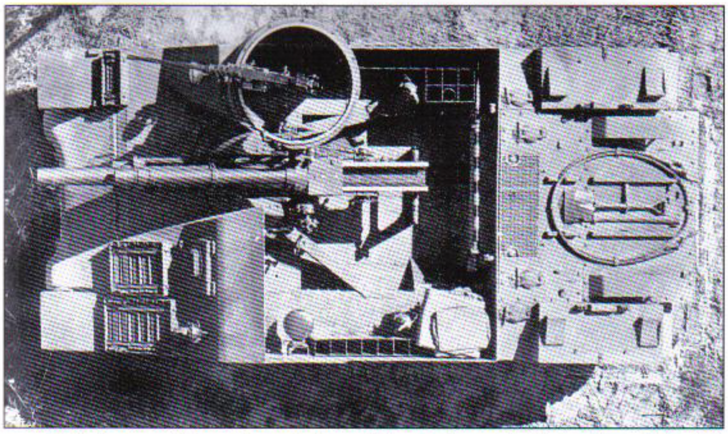
This is the first production M7 105mm HMC manufactured in April 1942. It has the E1230 transmission cover from the M3 medium tank which has a cut-out for the 75mm sponson gun. Also note that the rear sponson box is hinged to fold downward and that there are skids for additional fuel drums on the top of the box.



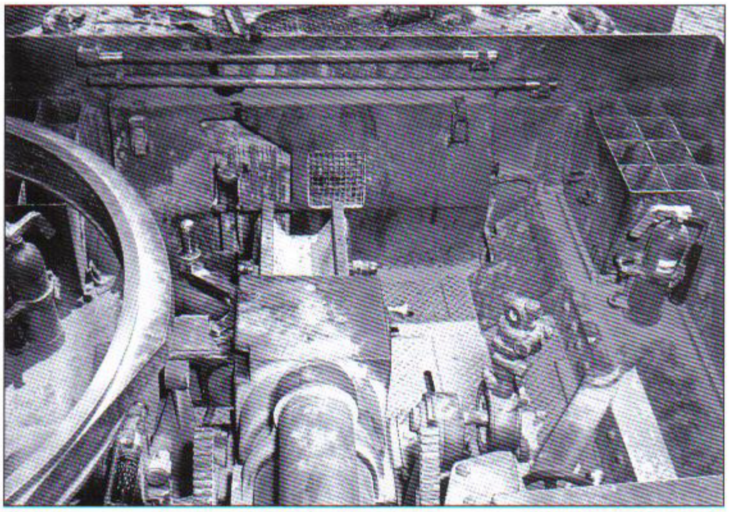
This overhead view shows the initial production M7 105mm HMC from the spring of 1942. Note that ammunition stowage is limited to two 12 round bins and that there are two crew seats on either side, Also, the transmission casting in front of the pulpit machine gun mount is the E1230 from the M3 medium tank with a slight cut-out for the sponson gun.



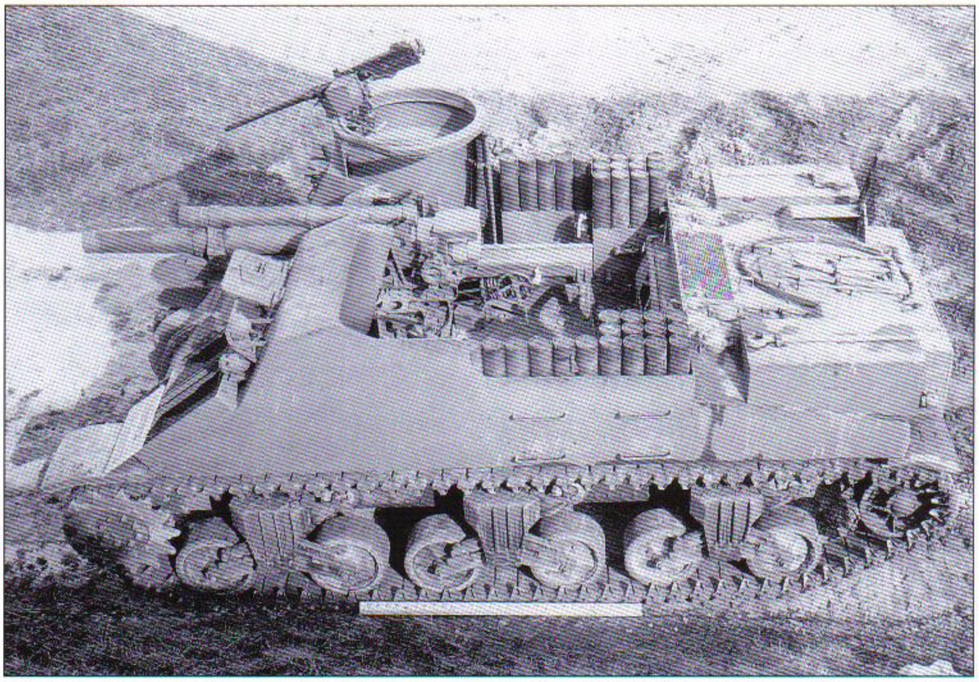
During the late spring of 1942, some M7 were fitted with the one piece Caterpillar transmission and the one-piece E4188 casting. Due to a variety of factors, this transmission became less common in the later half of 1942, and was seldom seen on vehicles manufactured in 1943. Note that this vehicle still has the early sponson box with the folding panel.



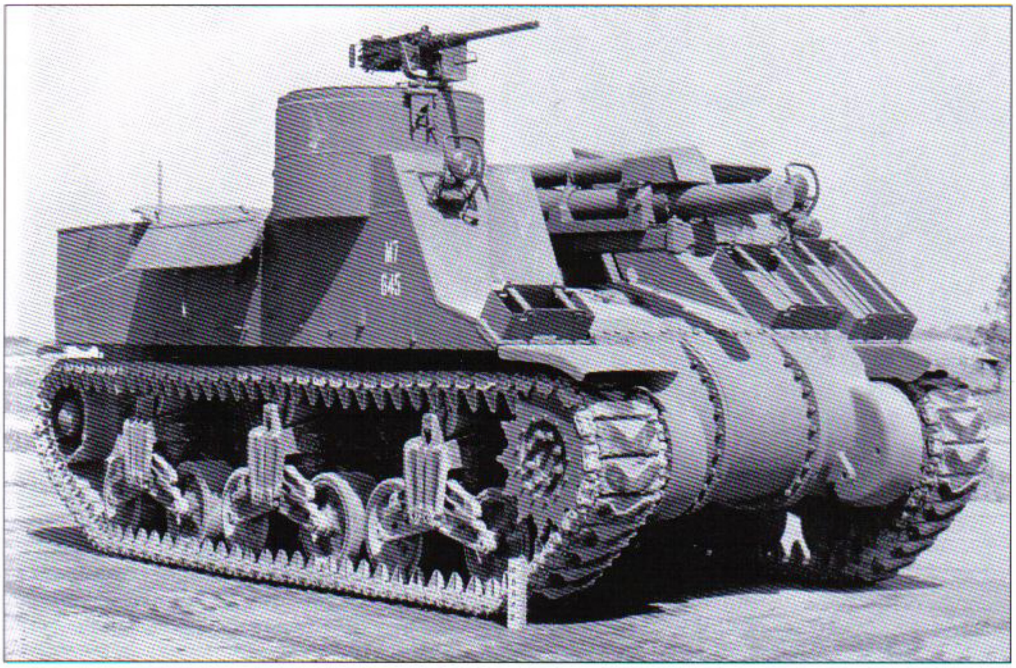
This is a useful overhead view of the early production style of the M7 105mm HMC from the spring and summer of 1942 with the E4188 transmission cover. In addition, there were changes in internal hull stowage starting in May 1942 with the addition of thirteen ready round racks in the crew compartment and the deletion of two of the four crew seats on the side walls.



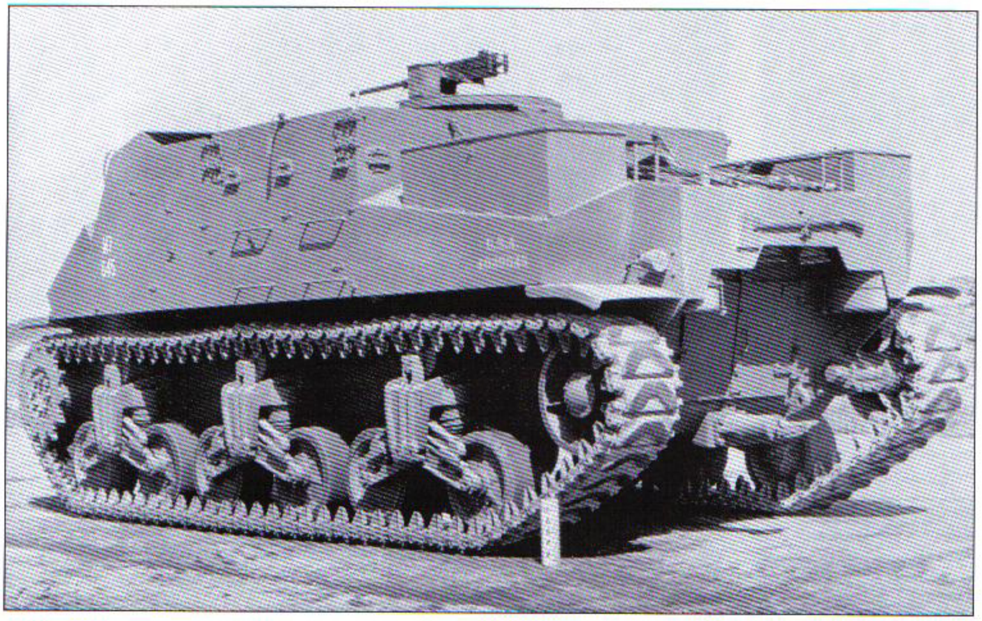
A useful interior view of an early production M7 105mm HMC with the revised ammunition stowage, taken at an artillery range in California in September 1943.



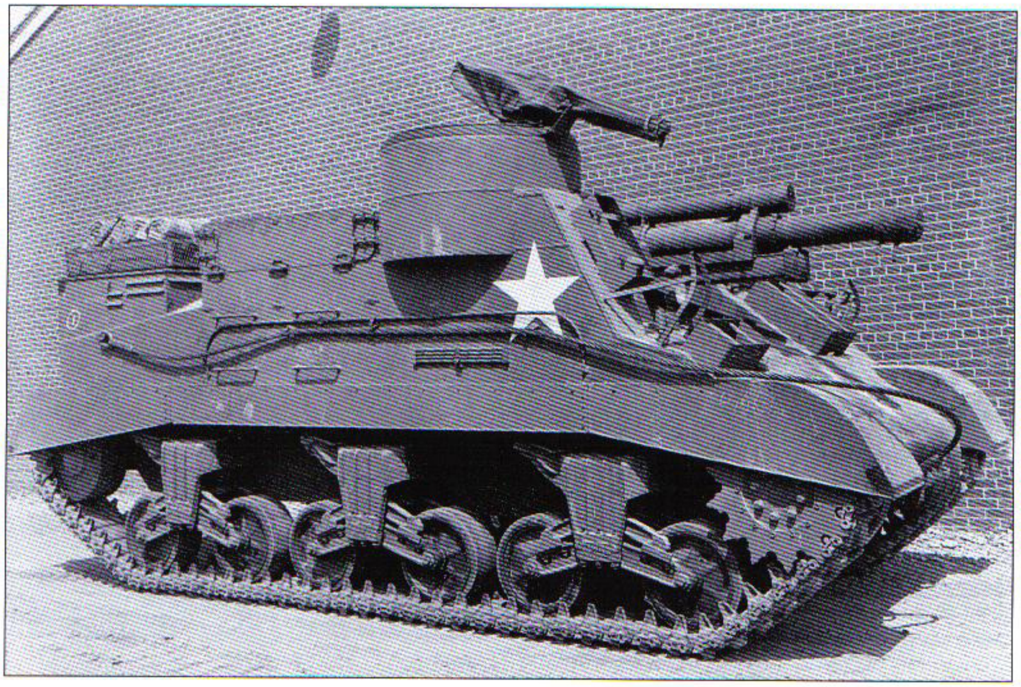
A good example of an intermediate production M7 105mm HMC, serial 1850, manufactured in December 1942. This was shortly before the deeper pulpit was introduced. Some vehicles produced earlier than this had already been fitted with the armored flaps around the fighting compartment, but this vehicle still lacks this feature. This M7 is fitted with the D47527 heavy duty bogie assemblies which were used intermittently on the M7 105mm HMC until being standardized in 1944.



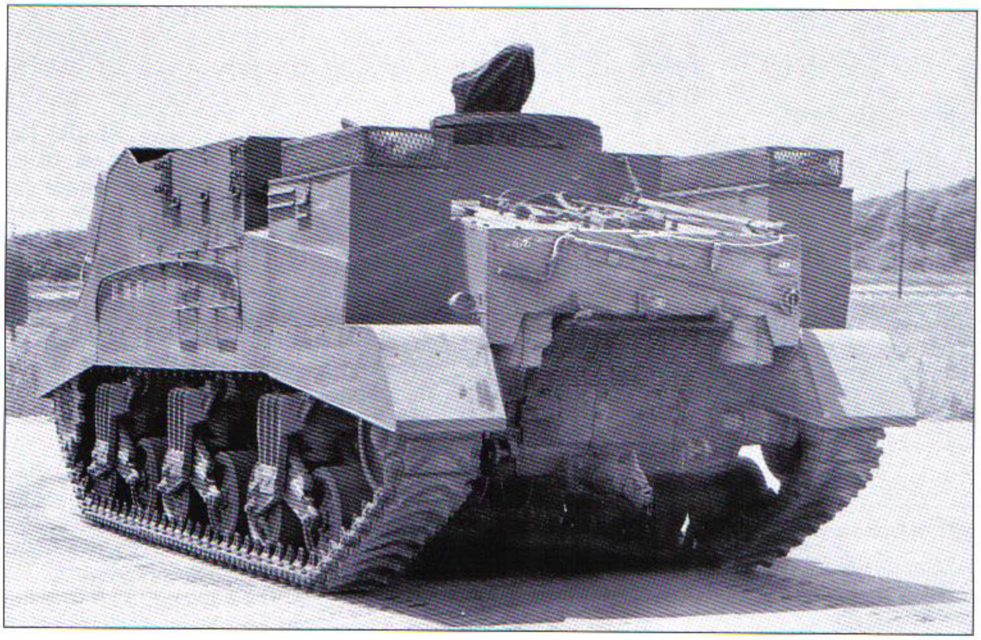
This is a fairly typical example of the intermediate production M7 105mm HMC, and was manufactured in July 1943. It has the deeper pulpit which was extended downward during January 1943 production. It also has the factory-fitted armored flaps on the side to protect the ammunition racks. The three piece transmission housing was re-introduced in the late summer of 1942, but was the style used on the M4 medium tank with the E4151 transmission cover on the right side which was a mirror image of the E1231 casting on the left. Although some M7 105mm HMC began to have the heavy duty vertical volute suspension as early as December 1942, it did not become standard until 1944. This vehicle still has the original D37893 bogie assemblies as seen on the M3 and early M4 medium tanks. The armored cover over the recuperator was not a standard fit.



This rear view of the same intermediate production M7 105mm HMC shows the characteristics of this series including the factory-fitted armored flaps around the fighting compartment to protect the ammunition.

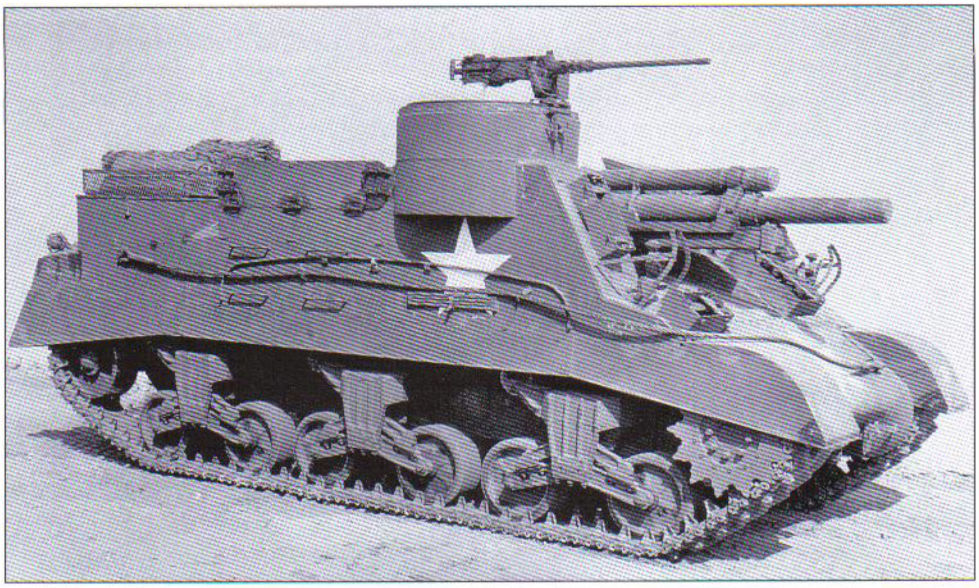


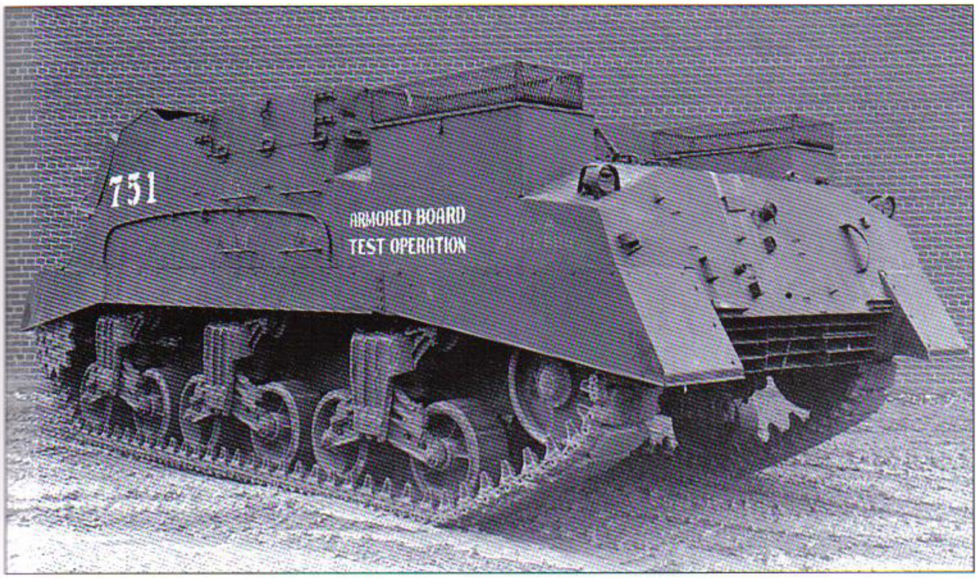
This is a good example of a late-production M7 105mm HMC built in 1944. It has the heavy duty vertical volute suspension with the one-piece return roller arms, late style headlight and grouser box fittings and the late style rear sponson boxes with the basket on the top.



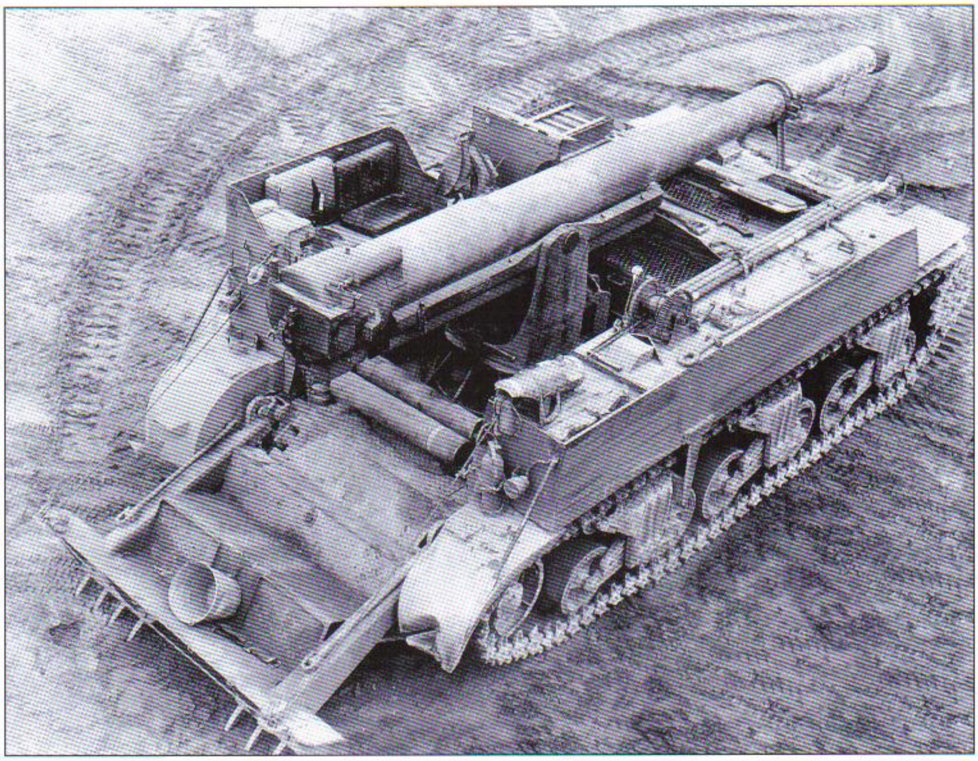
This rear view provides a good examination of a late M7 105mm HMC from the June 1944 production run showing the modified rear sponson boxes and the late rear deck details such as the exhaust deflector grating between the two air filters. Note also on the engine deck that the deck openings with the distinctive armored covers are no longer present.

A good example of a standard production M7B1 105mm HMC. This can be distinguished from the late production M7 105mm HMC by the rear hull, which extends back further than on the M7 105mm HMC.

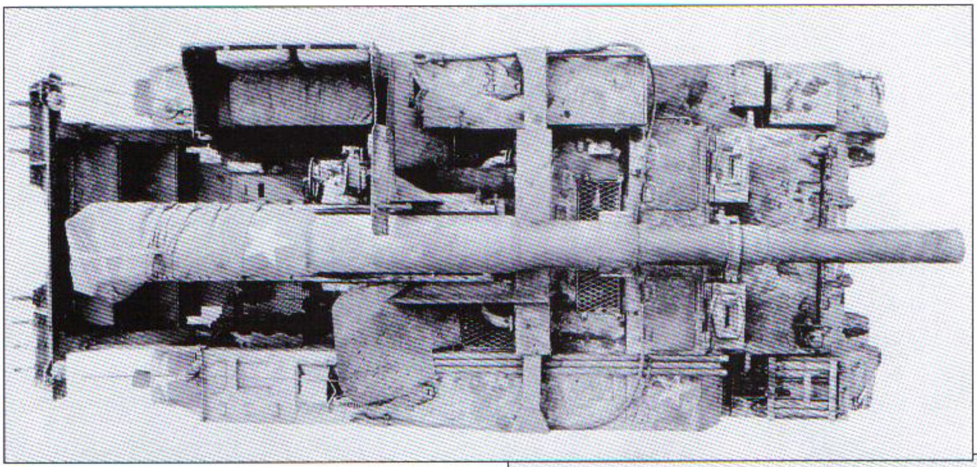




This rear view of a M7B1 105mm HMC shows the characteristic features of the M4A3 tank hull on which it was based including the angled rear plate and the standard D50260 exhaust deflector.

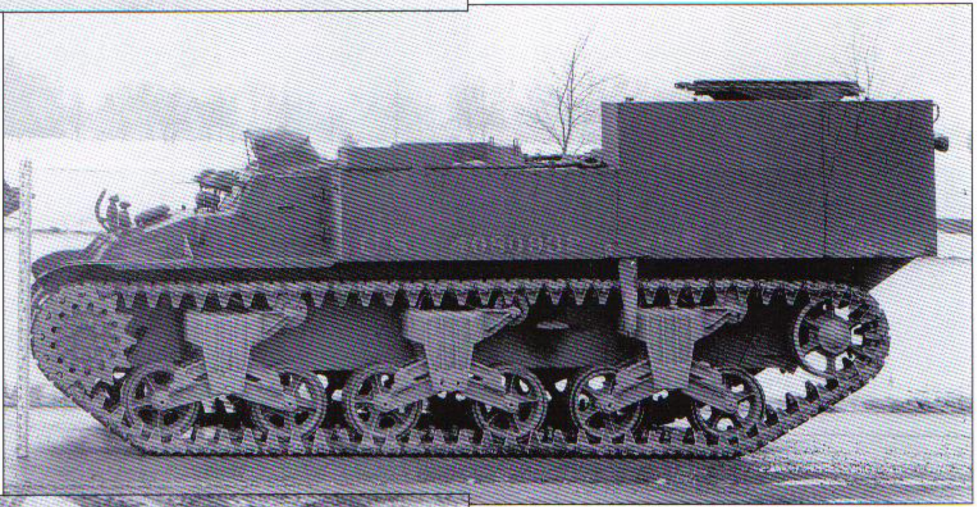


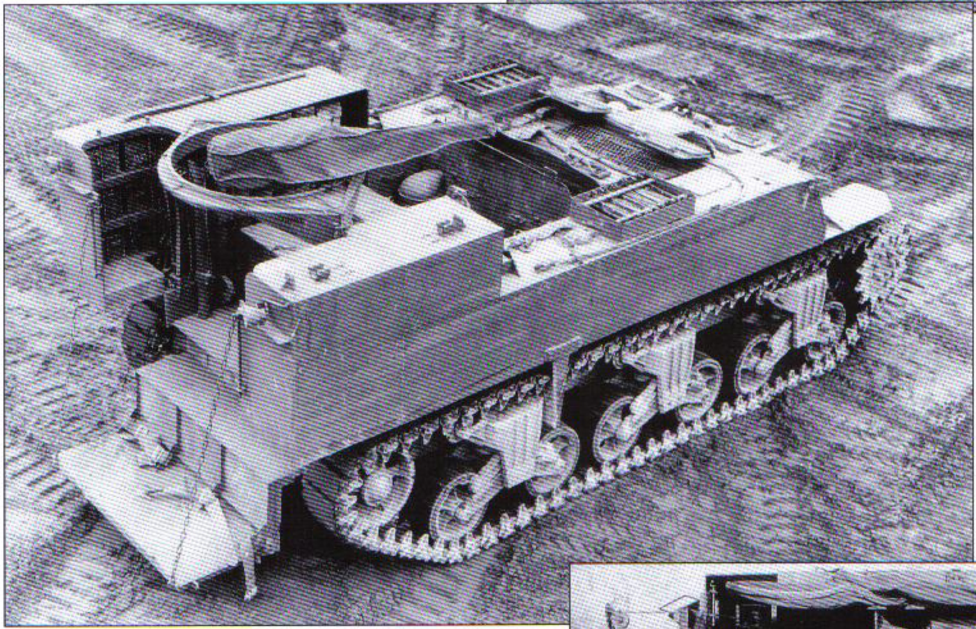
A useful overhead view of a standard production M12 155mm GMC after the February 1944 rebuild program. It has the standard D47527 heavy duty bogie assemblies.



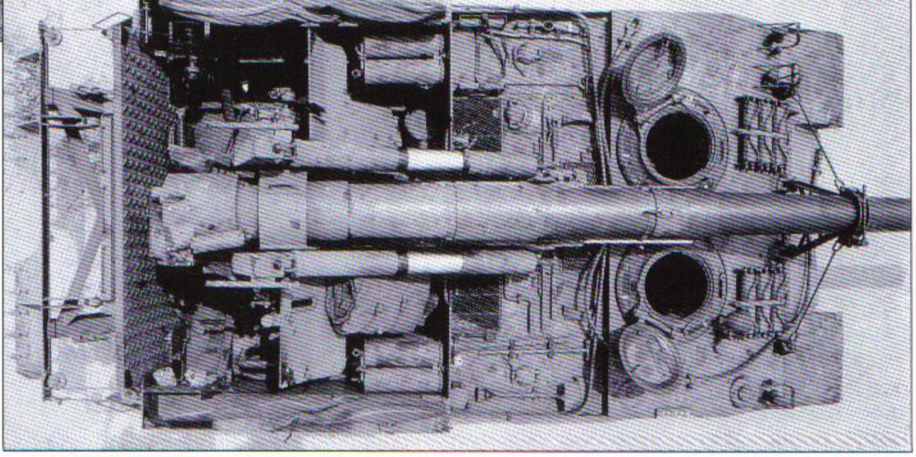
Another overhead view of the M12 155mm GMC from 1944 shows fairly typical markings details. This is a test vehicle fitted with a non-standard exhaust system over the engine deck.

The M12 155mm GMC was accompanied into combat by the M30 cargo carrier which carried 40 rounds of 155mm ammunition. This is an interesting view of a M30, and shows the seldom seen weather cover over the driver's hatch.

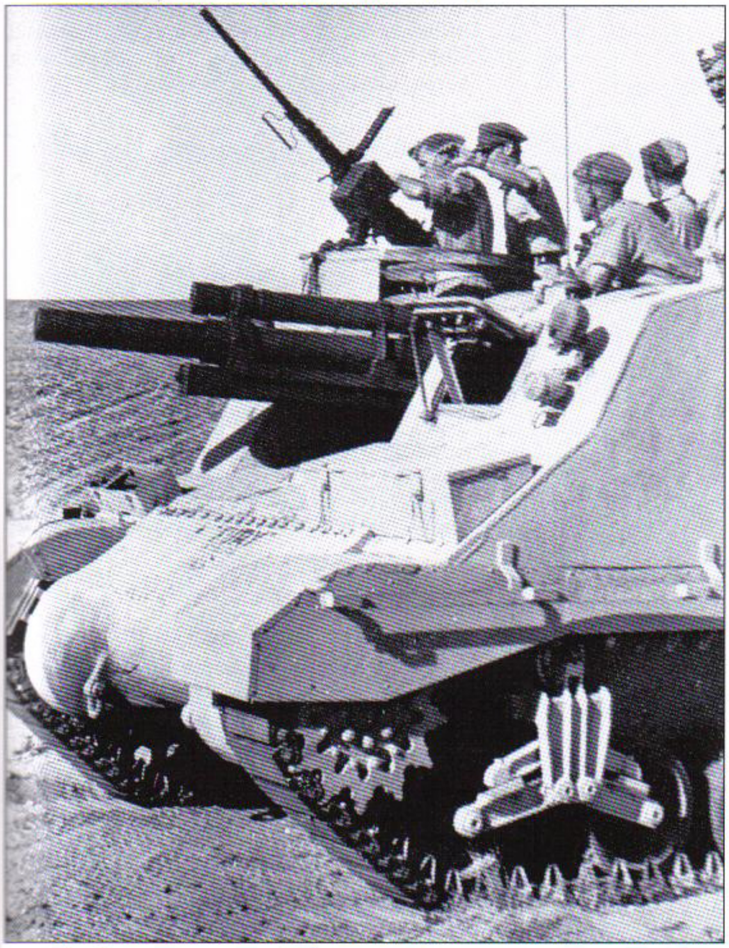




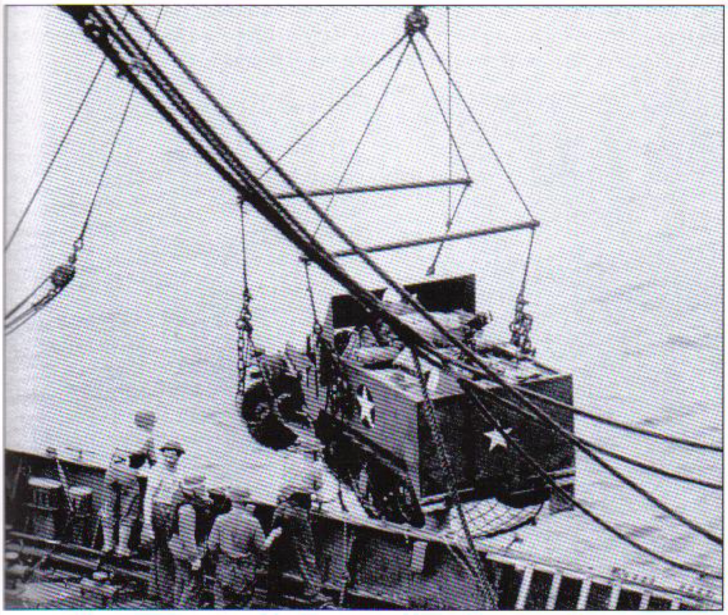
A useful overhead view of a M30 cargo carrier. In Europe, the M30 was modified to increase its capacity from 40 to 78 rounds.



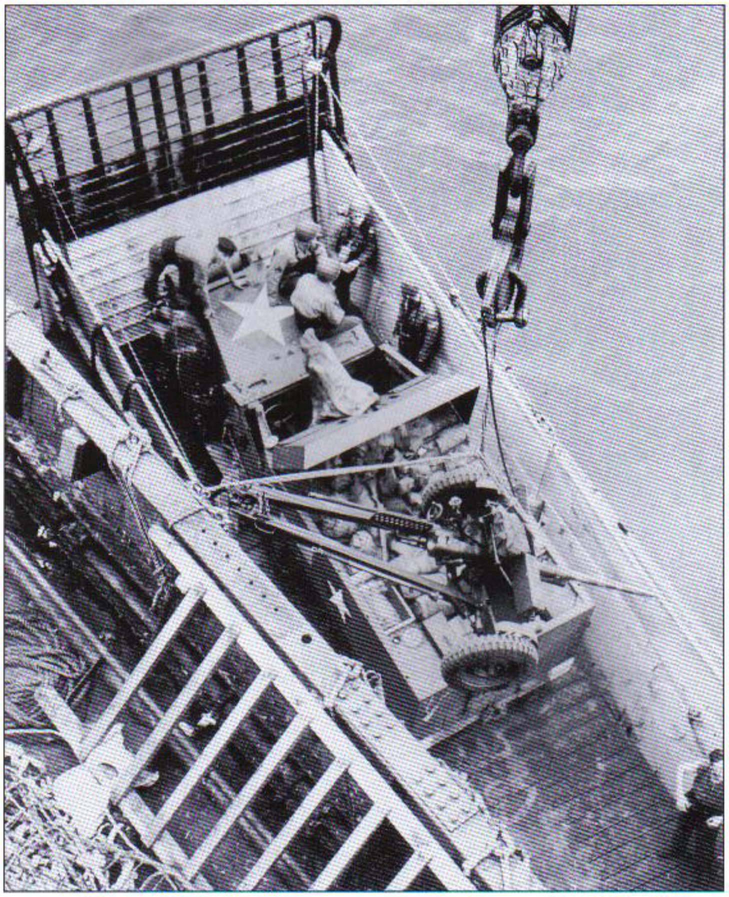
This is a useful overhead view of the T83 155mm gun motor carriage, later standardized as the M40. Only one of these vehicles was deployed in combat in World War II in Europe, along with a pilot of the related T89 8 inch howitzer motor carriage that was converted to the T83 configuration with a 155mm gun tube.



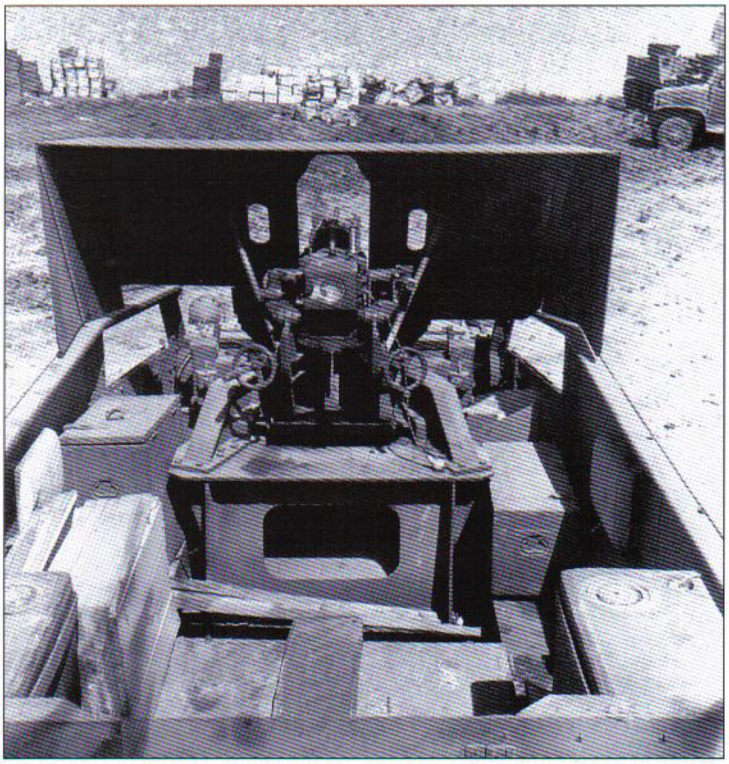
The first combat use of US armored field artillery was by the British Army which received 72 M7 105mm HMC prior to the second Battle of El Alamein. The British army dubbed the M7 105mm HMC "Priest" after its "pulpit" and about two dozen were used during the battle by the 11th Royal Horse Artillery. This particular M7 105mm HMC, named "Fury", was photographed by Col. J. B. Jarrett, a US Army liaison officer in North Africa at the time. This has the features of the early production batch of M7 105mm HMC, including the one-piece E4188 transmission cover. (MHI)



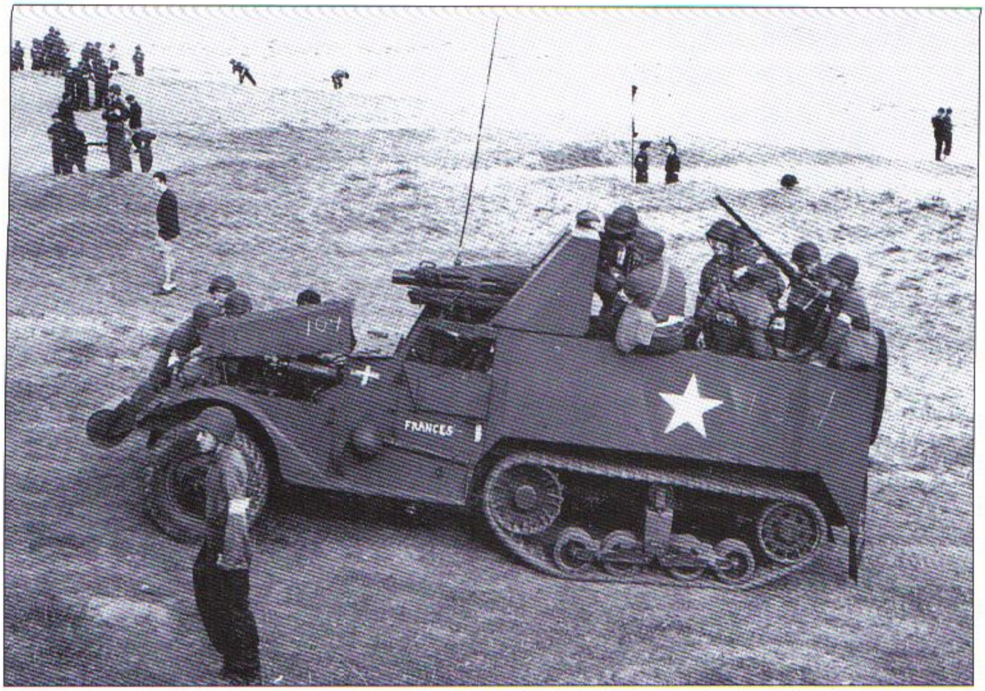
A T30 75mm HMC is loaded off a transport ship into the hold of a LCM during the landing operations off the coast of Oran in November 1942 as part of Operation Torch. The prescribed air identification marking for Operation Torch was a white star on a blue-background, but it was usually seen on upper-surfaces of the vehicle, not the vehicle sides as seen here.



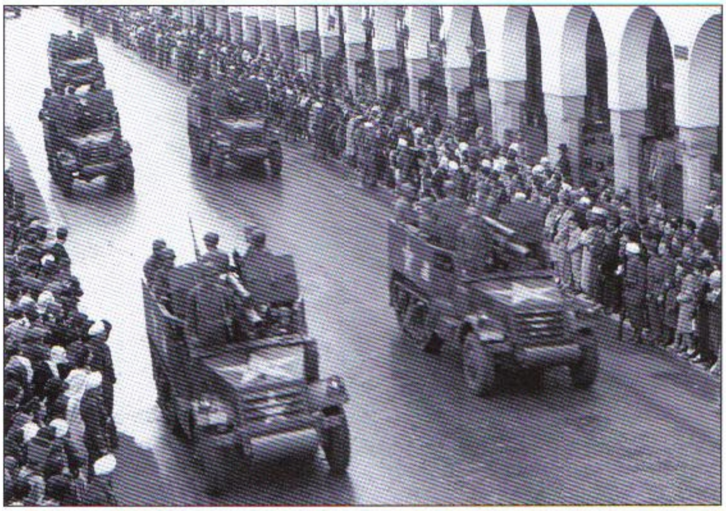
Another view of the T30 75mm HMC in the hold of a LCM prior to the landings at Oran in French North Africa as a 37mm anti-tank gun is lowered into the craft.



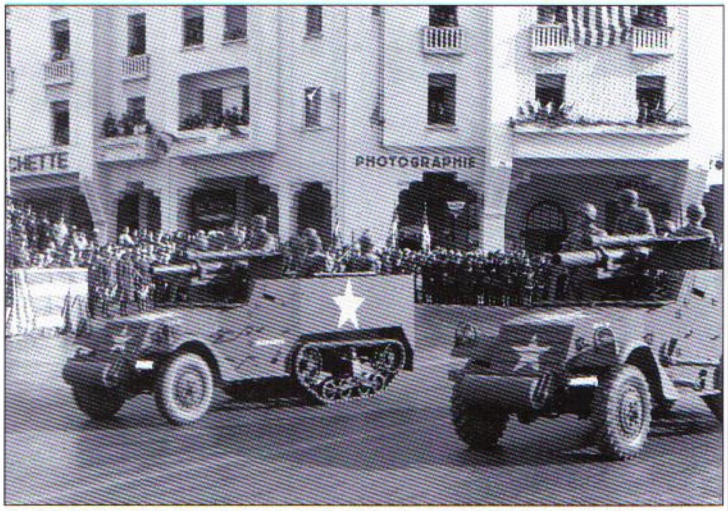
A detail view inside the fighting compartment of a T30 75mm HMC in Oran on 6 April 1943 shows the basic configuration of the vehicle. As is evident in this view, the M1A1 75mm howitzer was mounted on a simple box attachment in the M3 half-track fighting compartment. This vehicle proved to be poorly armored and too vulnerable to enemy fire, but was used with considerable success in spite of its drawbacks.



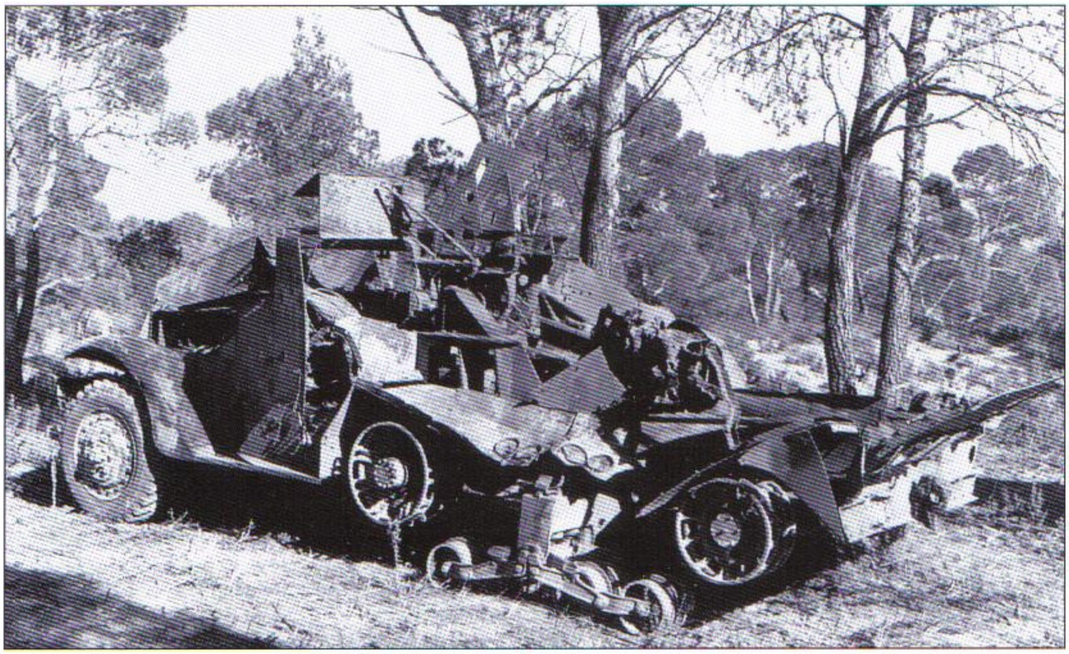
A T30 75mm HMC shortly after having landed near Algiers on 8 November 1942 during Operation Torch. These landings were conducted mainly by infantry units, but a small number of T30 75mm HMC and T19 105mm HMC were landed to provide fire support.



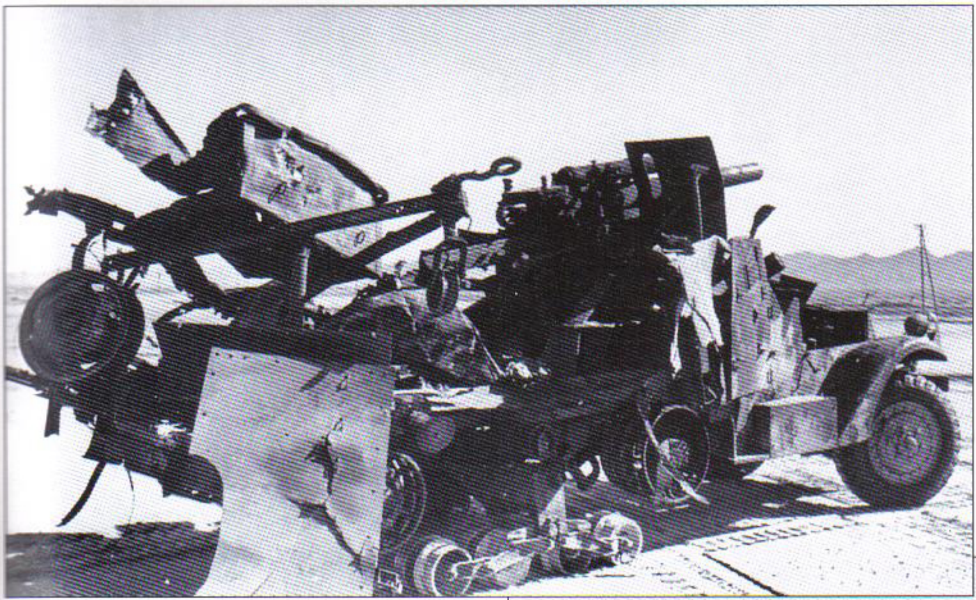
A group of T19 105mm HMC of the 9th Field Artillery Battalion, 7th Regimental Combat Team, 3rd Infantry Division take part in a parade in Rabat, Morocco on 19 December 1942.



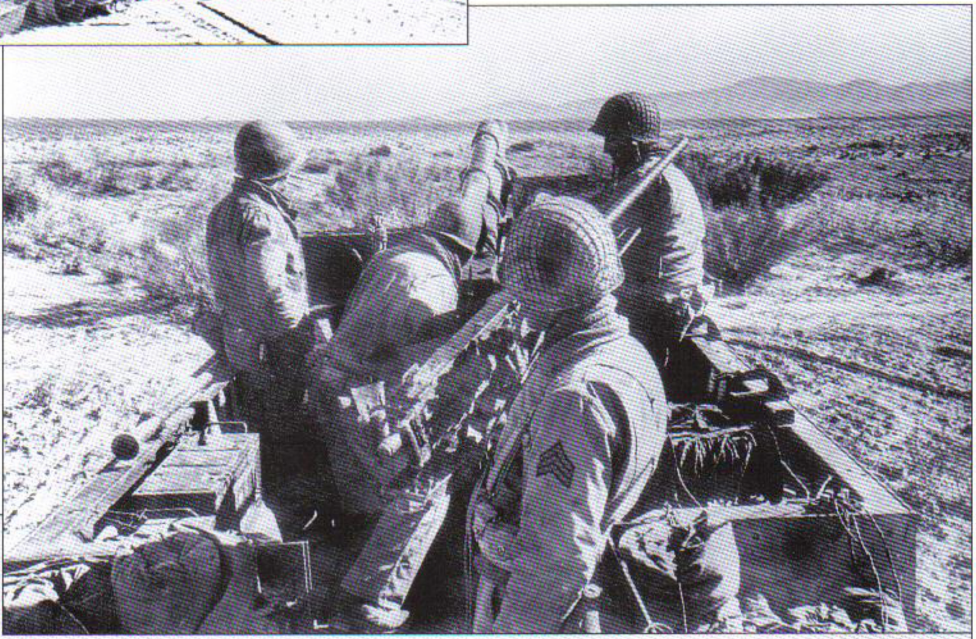
Another view of the T19 105mm HMC on parade in Rabat as they pass a viewing stand including Gen. George Patton, and the French commander, Gen. Nogues. The vehicle to the left is named "Ironsides".



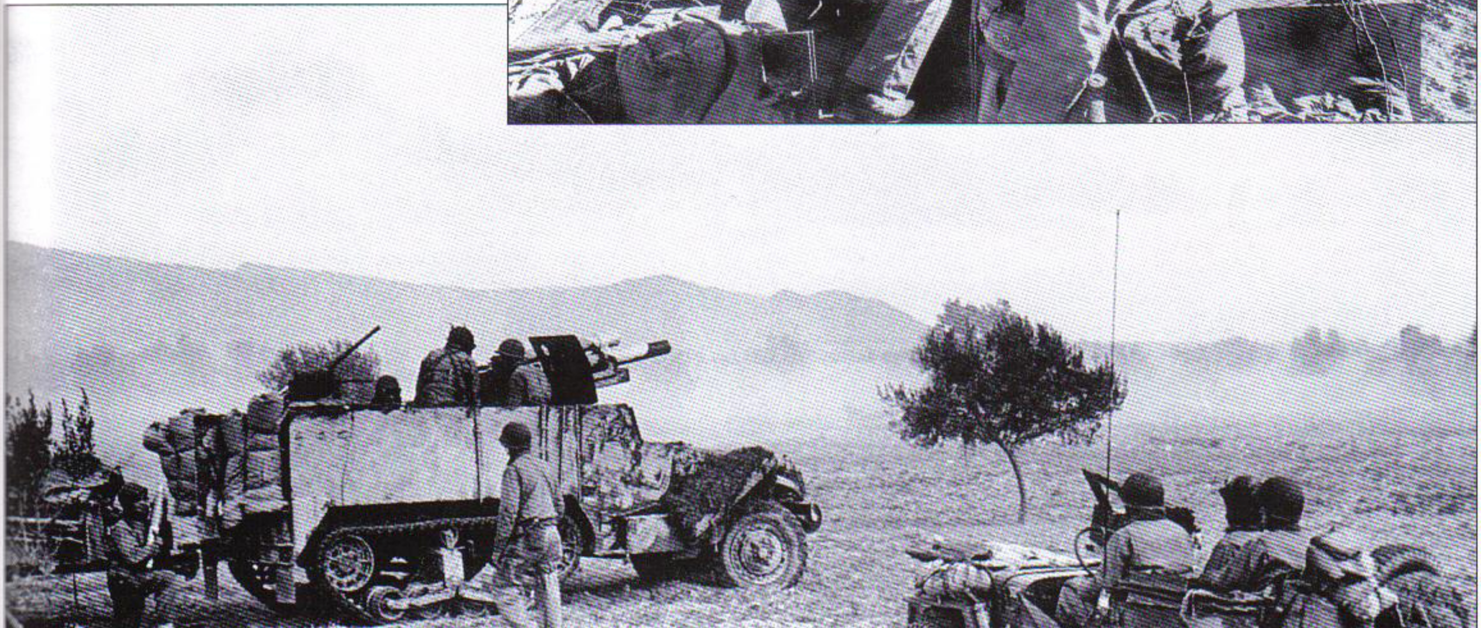
During February 1943, the US Army's 1st Armored Division endured a series of sharp encounters with German forces in Tunisia. This is a T19 105mm HMC that was destroyed by a direct hit from a bomb from a Ju-87 Stuka dive bomber on 2 February 1943 during an attack towards Maknassy by the 81st Reconnaissance Battalion.



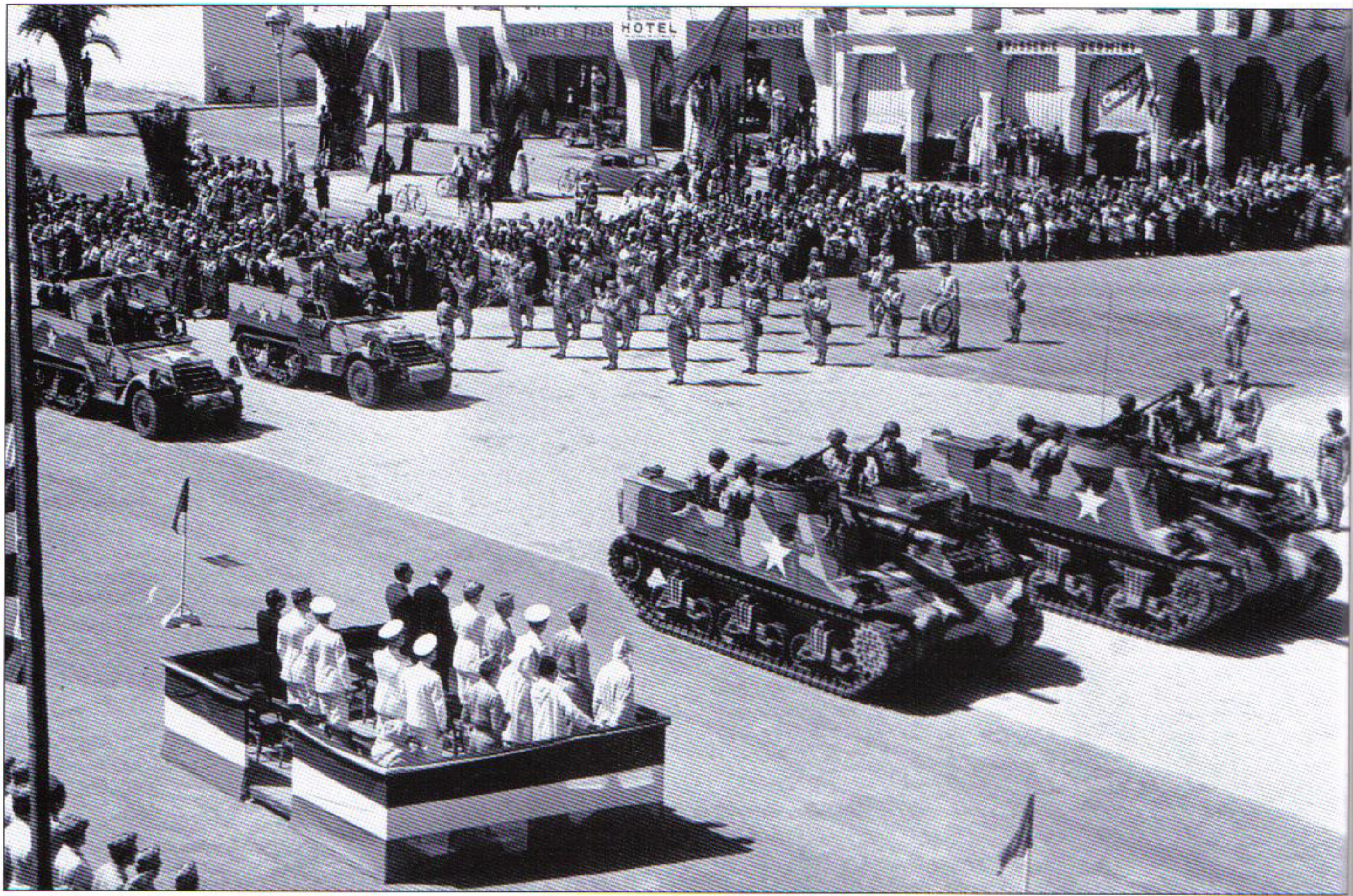
Another example of a T19 105mm HMC knocked out during the Tunisian campaign, this time during the fighting around Sened. A 1-ton trailer has been loaded up on to the wrecked rear end of the vehicle.



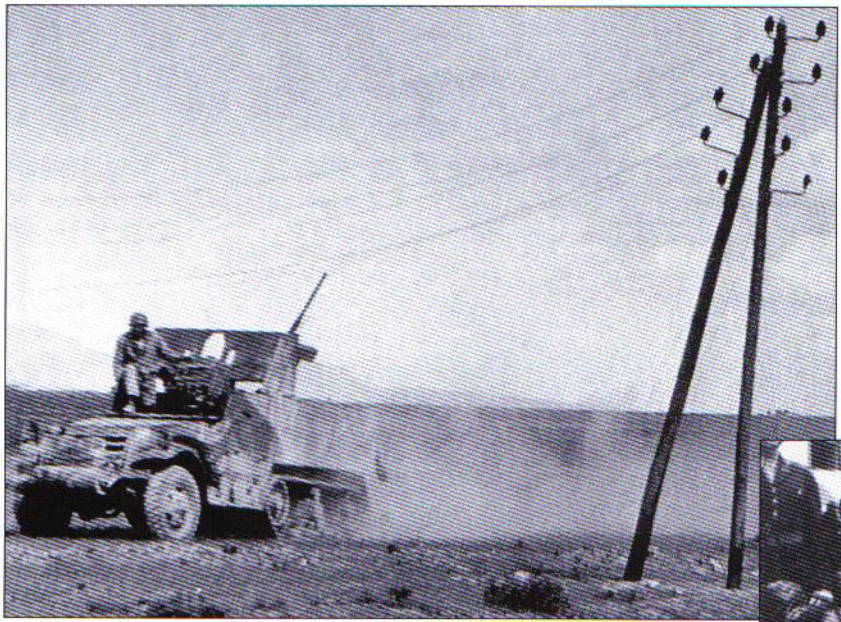
The crew of a T19 105mm HMC prepare to fire the howitzer during fighting in Tunisia in the spring of 1943.



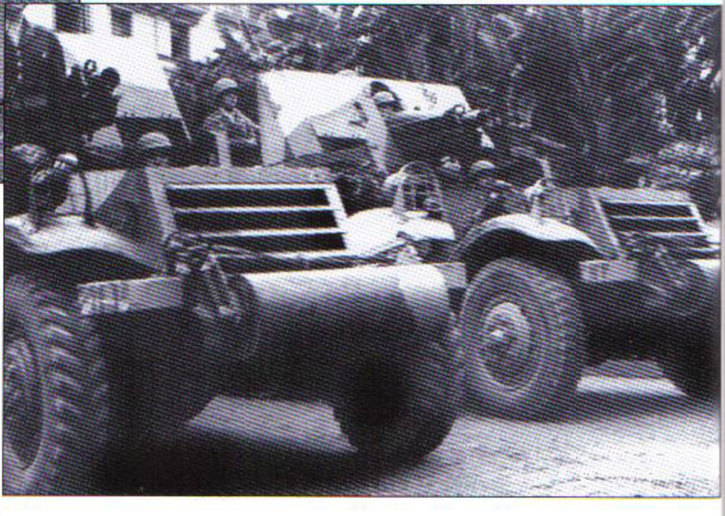
A T19 105mm HMC in action in Tunisia in the spring of 1943. By this stage, many armored vehicle crews had camouflaged their vehicles by painting them with and improvised mixture of mud.



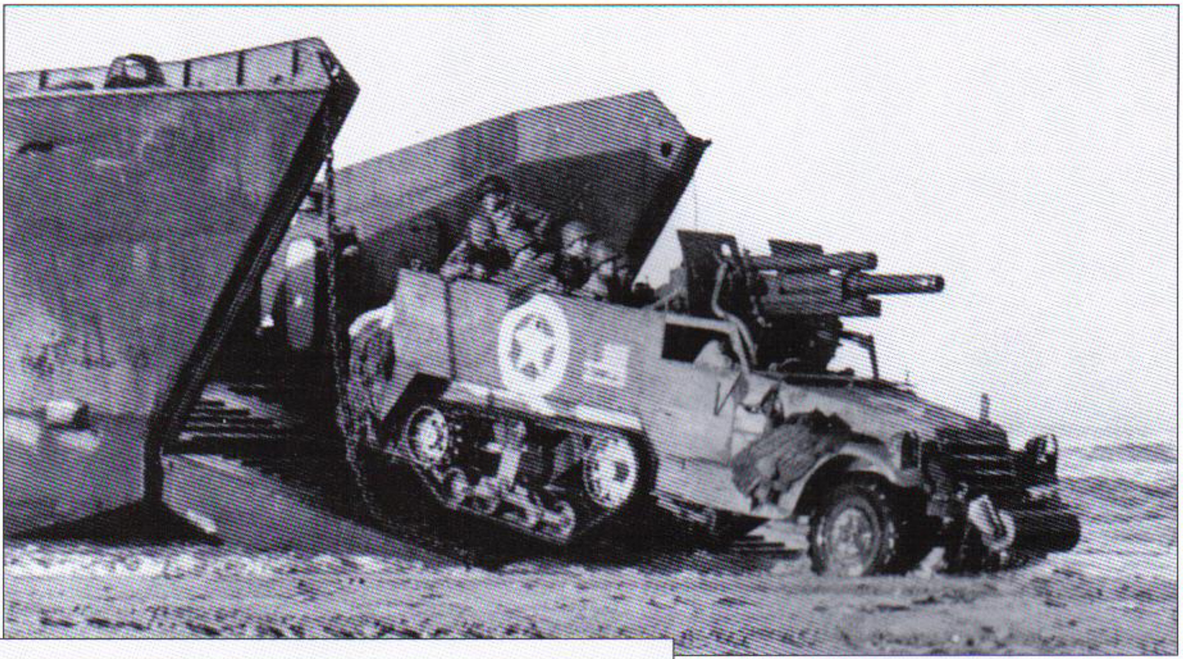
A view of Rabat on 4 July 1943 during a parade celebrating American independence day. In the lead are a pair of M7 105mm HMC, and behind them some T30 75mm HMC. The M7 105mm HMC was not widely used by US troops during the fighting in Tunisia.



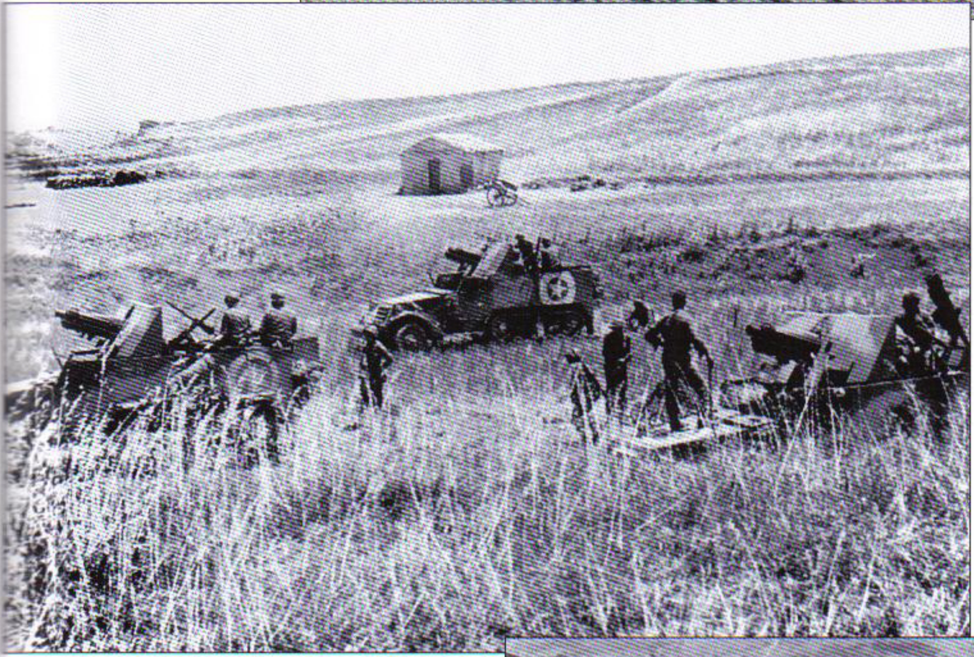
A camouflage painted T30 75mm HMC moves towards the front in Tunisia in the spring of 1943.



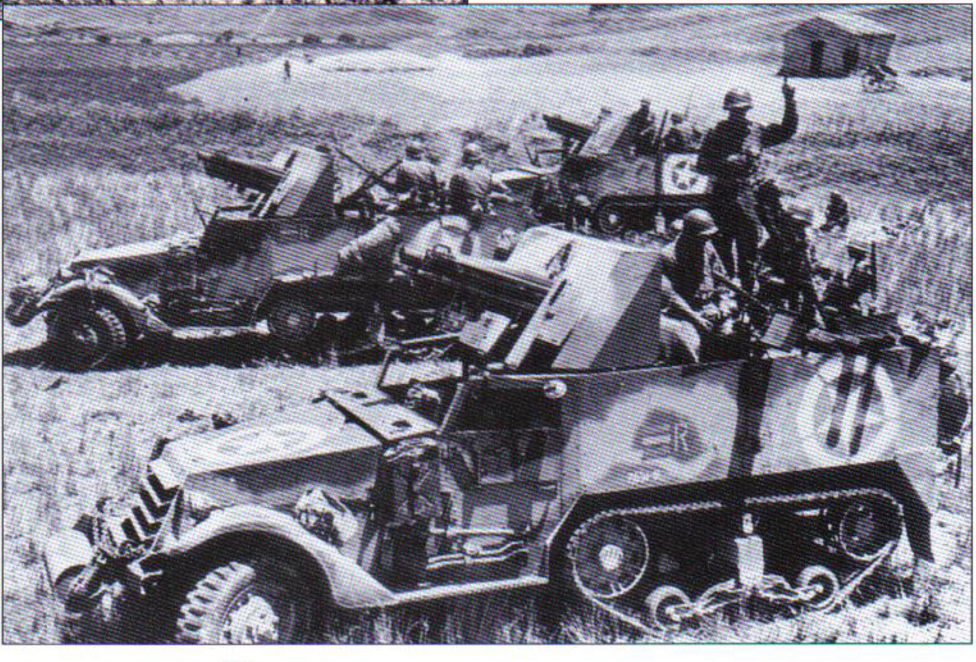
A close-up of two of the T30 75mm HMC taking part in 4 July 1943 parade in Rabat. The camouflage scheme is neater than the style actually used in combat in Tunisia which tended to be an improvised type using local mud.



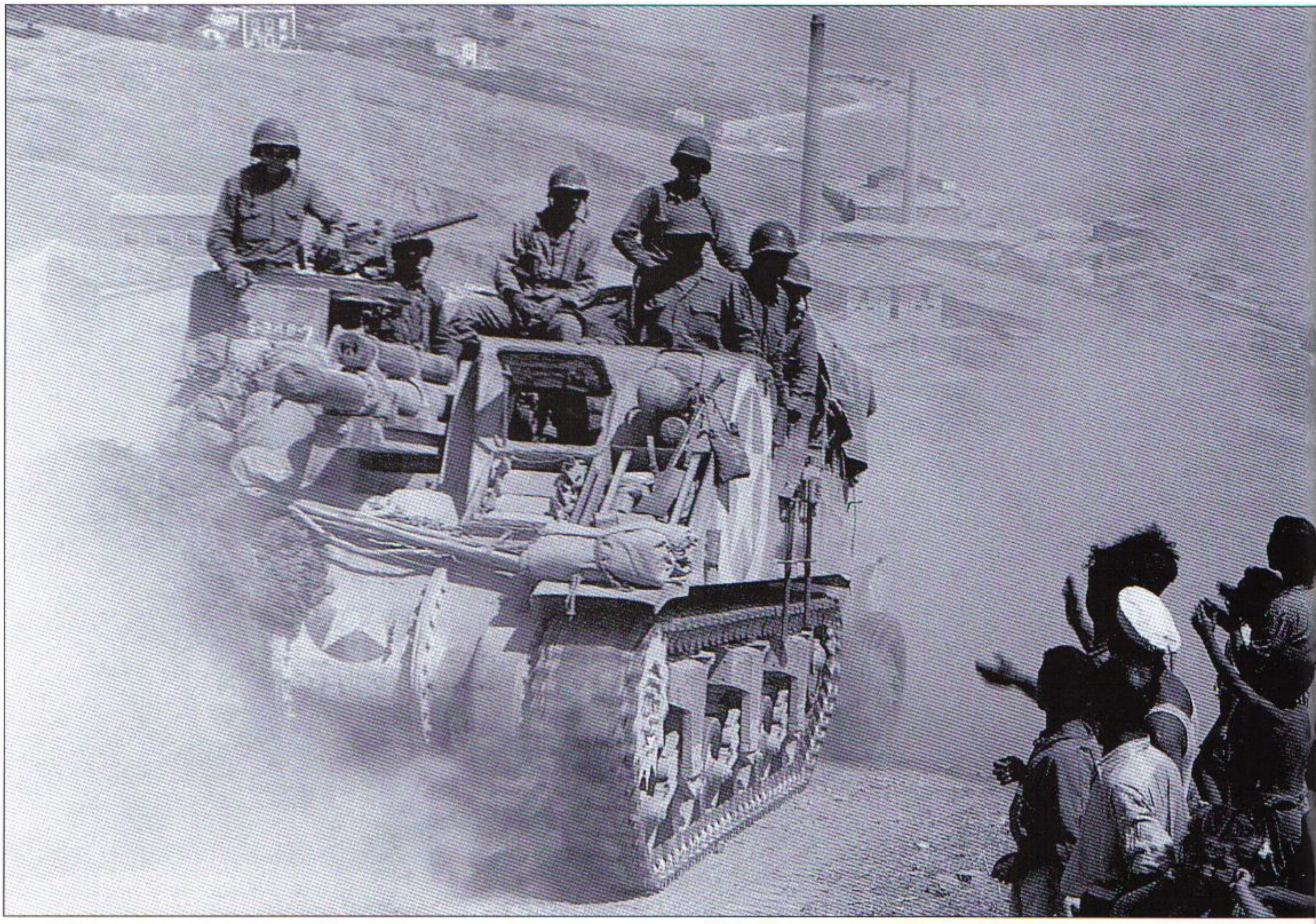
The T19 105mm HMC was still in service at the time of Operation Husky, the invasion of Sicily in July 1943. Here, one comes ashore near Licata. It has the large circle around the star that was mandated for Husky after experiences in North Africa where it was found that the star alone could be mistaken for a German cross at long ranges.



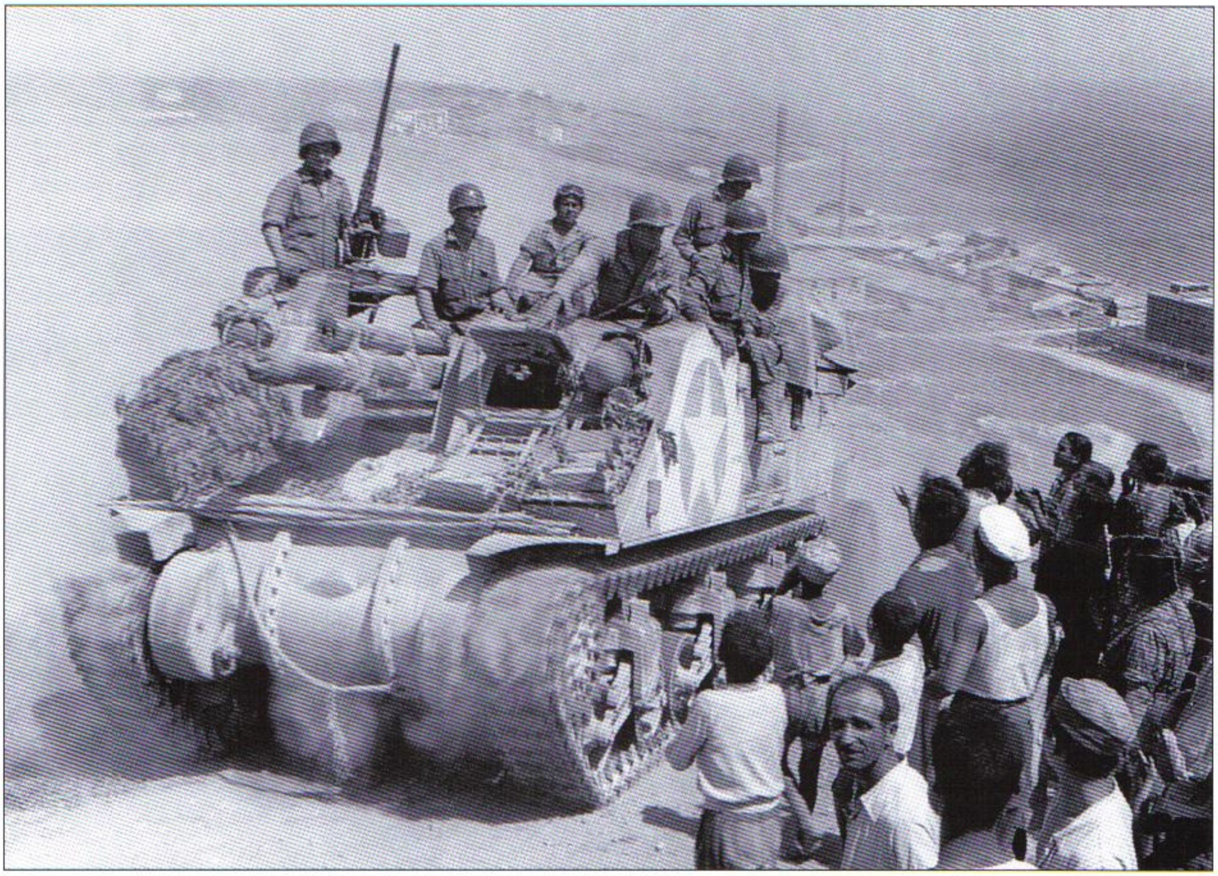
A platoon of T30 75mm HMC provide fire support for the infantry during the landings at Licata, Sicily on 10 July 1943. There was very little armor landed in the initial waves of the invasion, and self-propelled artillery on half-tracks was one of the main sources of fire support aside from naval gunfire.



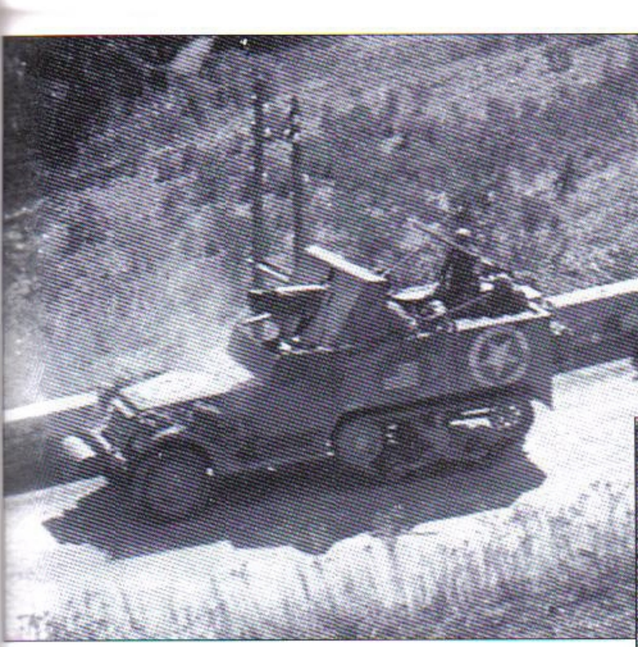
A close-up of the T30 75mm HMC at Licata. The three color bars on the vehicle side are quartermaster shipping markings. The unit ID code, 2651-R can be seen below the bars. From the last two digits of the unit code, the bars colors were light gray top and bottom and blue in the center. The vehicle is finished in the usual earth yellow over olive drab, the official pattern ordered for Husky.



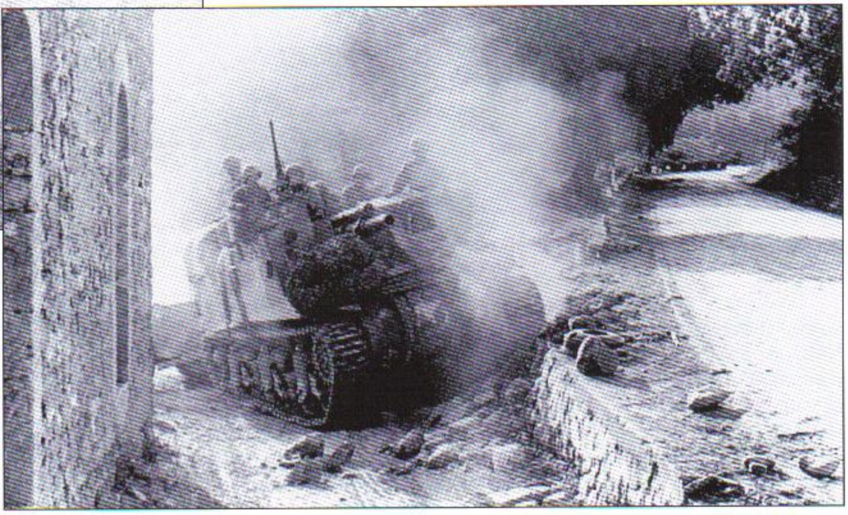
Operation Husky, the invasion of Sicily, saw the first widespread use of the M7 105mm HMC by the US Army. This is a vehicle from the 2nd Armored Division on 20 July 1943 near Sciacca.



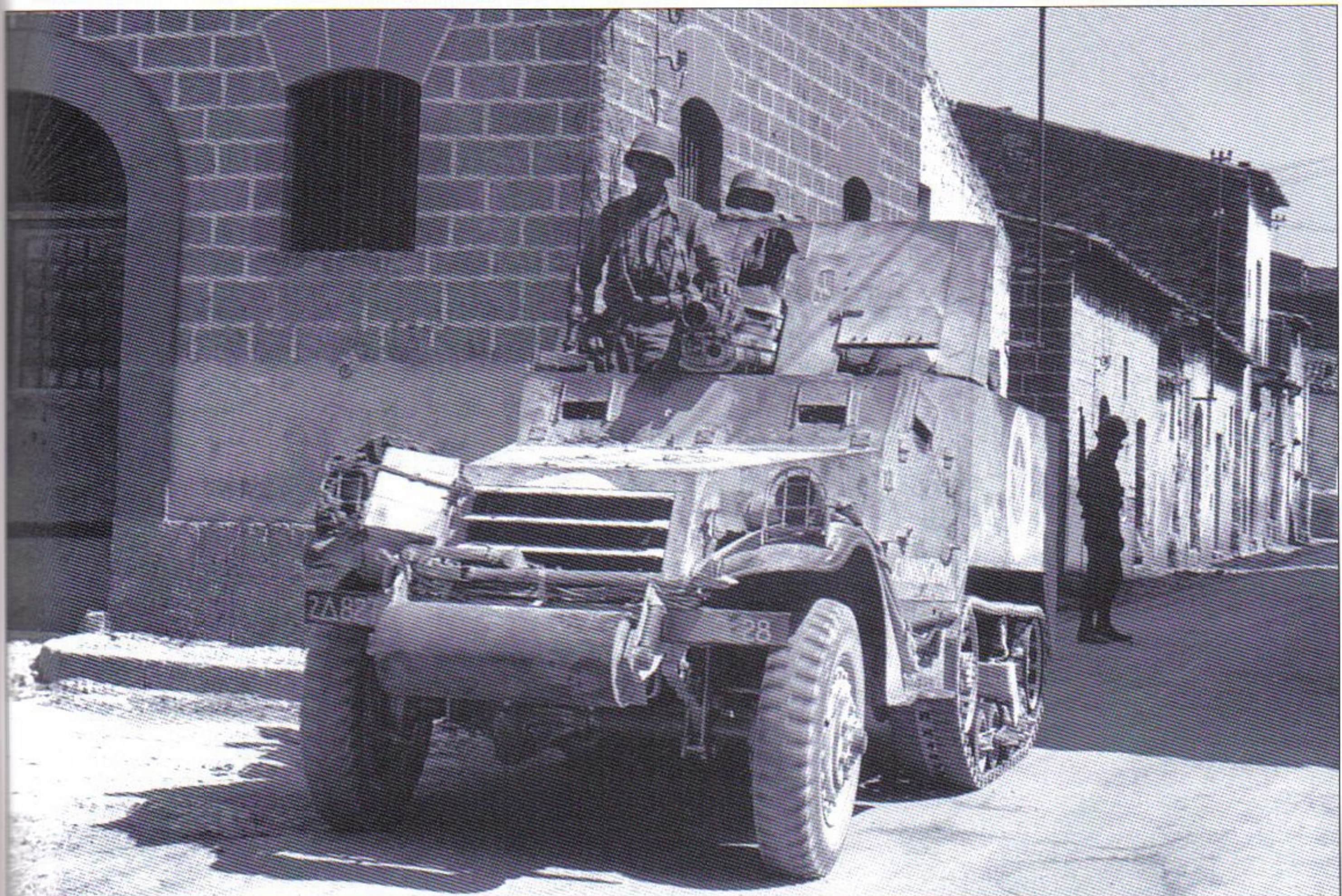
A view of another M7 105mm HMC from the 2nd Armored Division column near Sciacca on 20 July 1943. It is from the early production batch with the side opening sponson box hatches.



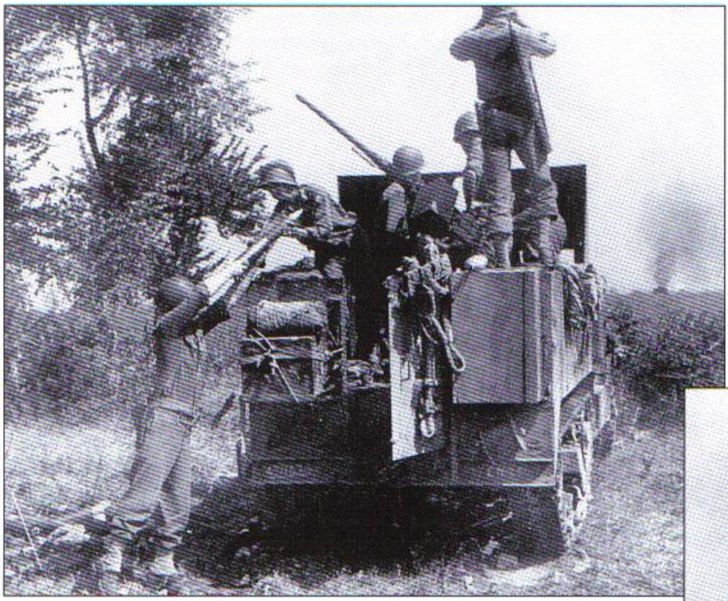
A T30 75mm HMC from the 15th Cannon Company of the 3rd Infantry Division fires on German positions near Palermo on 21 July 1943 during the Sicilian campaign.



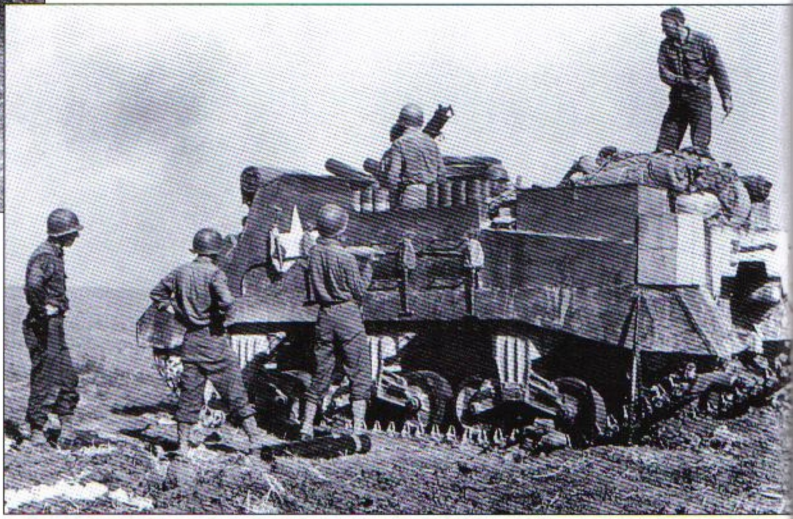
A M7 105mm HMC drives up a road embankment during the final phase of the fighting on Sicily on 7 August 1943. The steel track were more popular in the Italian theater than in Europe.



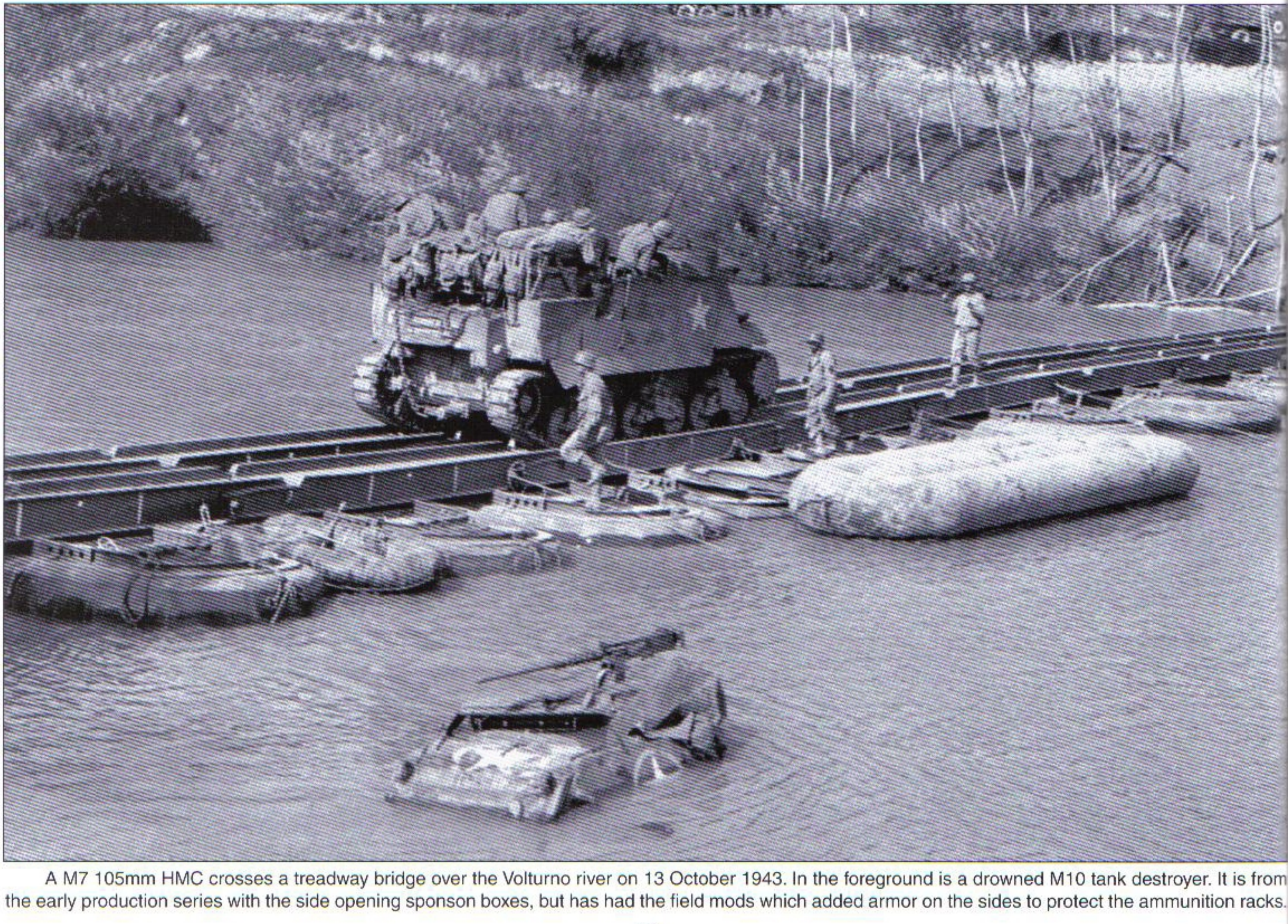
A T30 75mm HMC named "Cunningham" of Company C, 82nd Reconnaissance Battalion, 2nd Armored Division moves through Rebera, Sicily on 25 July 1943. This unit had spearheaded the division's drive on Palermo, and entered the city on 23 July 1943.



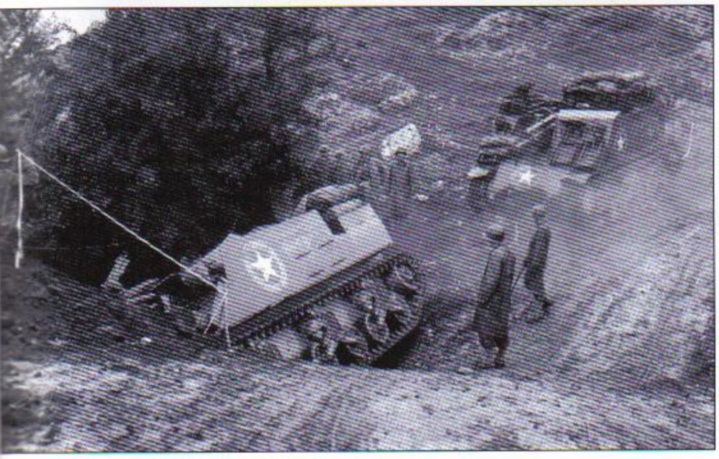
A T30 75mm HMC of the 157th Cannon Company, 45th Division conducts a fire mission in the beach-head at Salerno following the amphibious landings on 9 September 1943. Salerno was the first Allied landing on the Italian mainland after the fighting on Sicily.



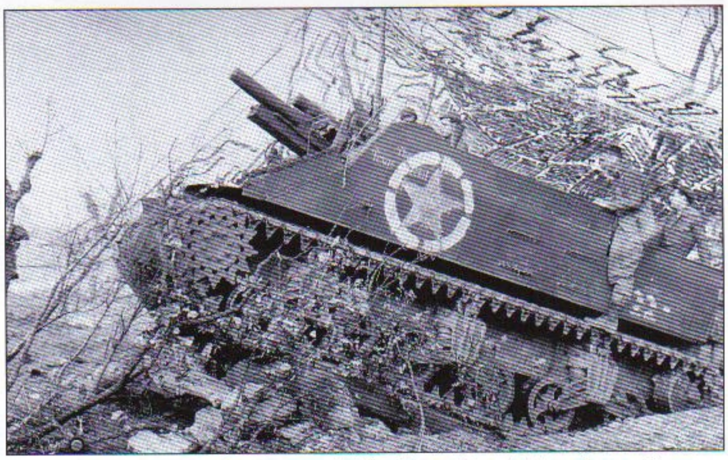
Following the Salerno landings, the Allied forces began an assault towards Naples in late September 1943. This M7 105mm HMC is providing fire support in the Naples area during this campaign. The sand shields are not the factory type and are presumably a field fit. It is also worth noting that this is one of the earliest combat photos showing a vehicle with the heavy duty suspension bogies fitted, and the vehicle is a typical late 1942 intermediate-production type prior to the addition of the armor flaps around the fighting compartment.



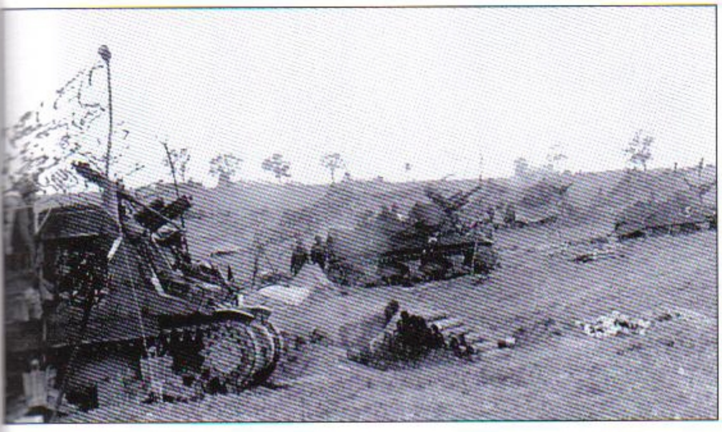
A M7 105mm HMC crosses a treadway bridge over the Volturno river on 13 October 1943. In the foreground is a drowned M10 tank destroyer. It is from the early production series with the side opening sponson boxes, but has had the field mods which added armor on the sides to protect the ammunition racks.



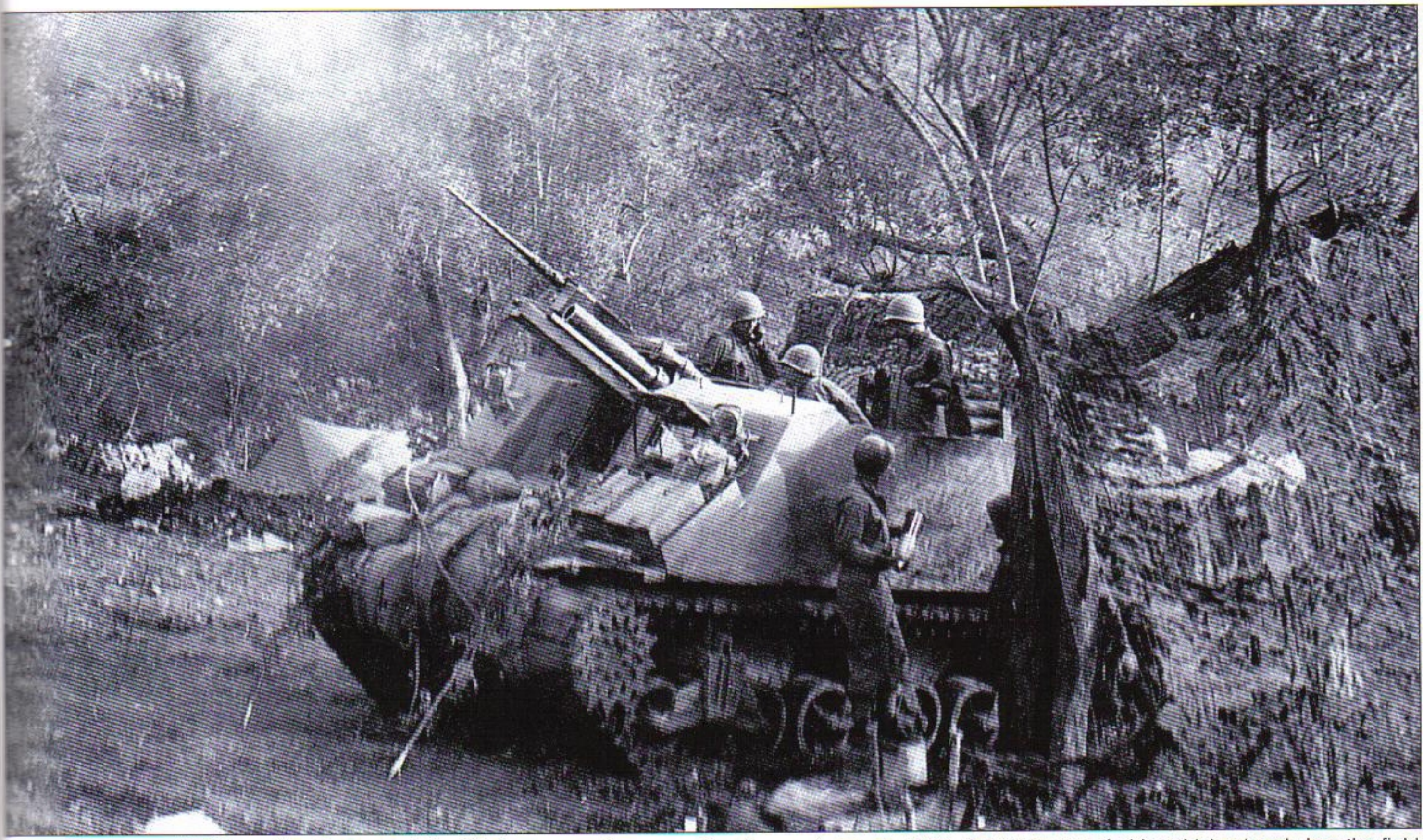
A M7 105mm HMC tries to extract another one that has gotten stuck in a muddy hole near Caserta, Italy on 28 October 1943. Both vehicles are from the spring/summer 1942 production batch with the one piece E4188 transmission cover, and both have been modified by the addition of extra armor plate welded to cover the ammo racks.



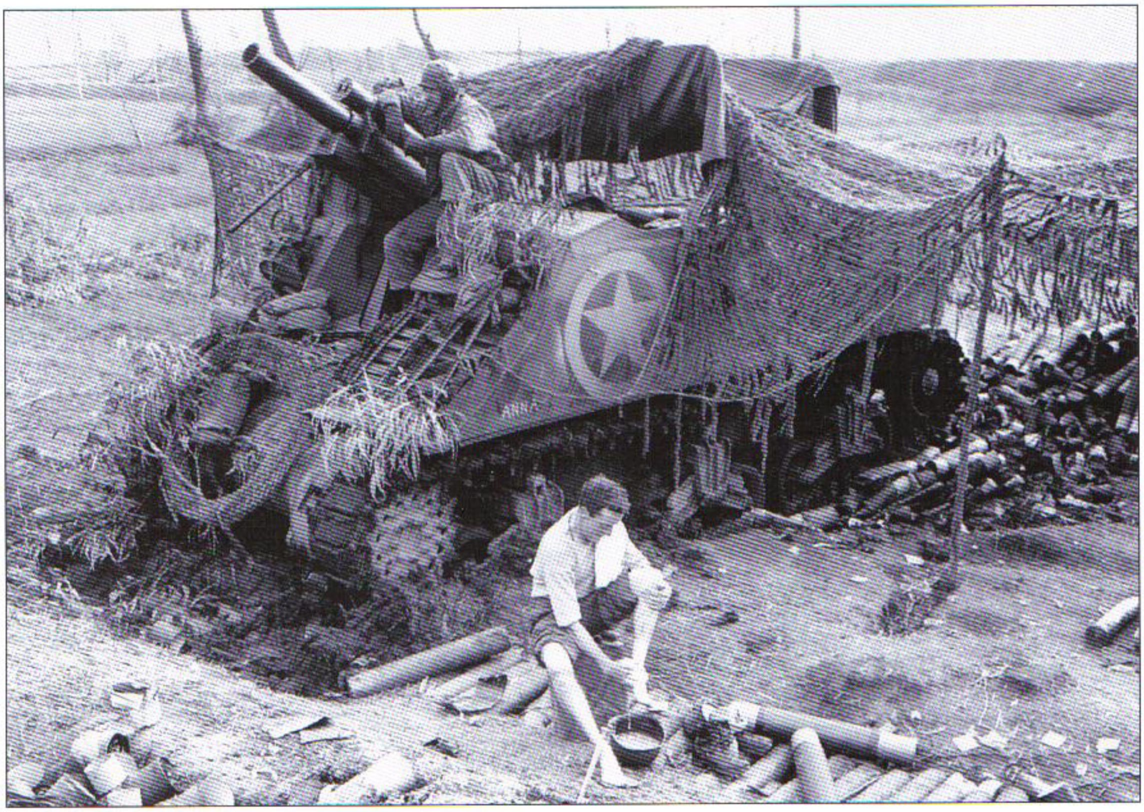
A M7 105mm HMC nicknamed "The Texas Special" has been driven up an improvised ramp to get higher elevation for a fire mission during the fighting along the Rapido river on 22 January 1944 in support of the 34th Division. This vehicle provides a good example of a field modification with an armored panel added on the side to cover the exposed ammunition racks above the handles on the hull side. On production vehicles these flaps were hinged but on the field mods they were welded. The vehicle's score against German targets has been painted on the rear hull side.



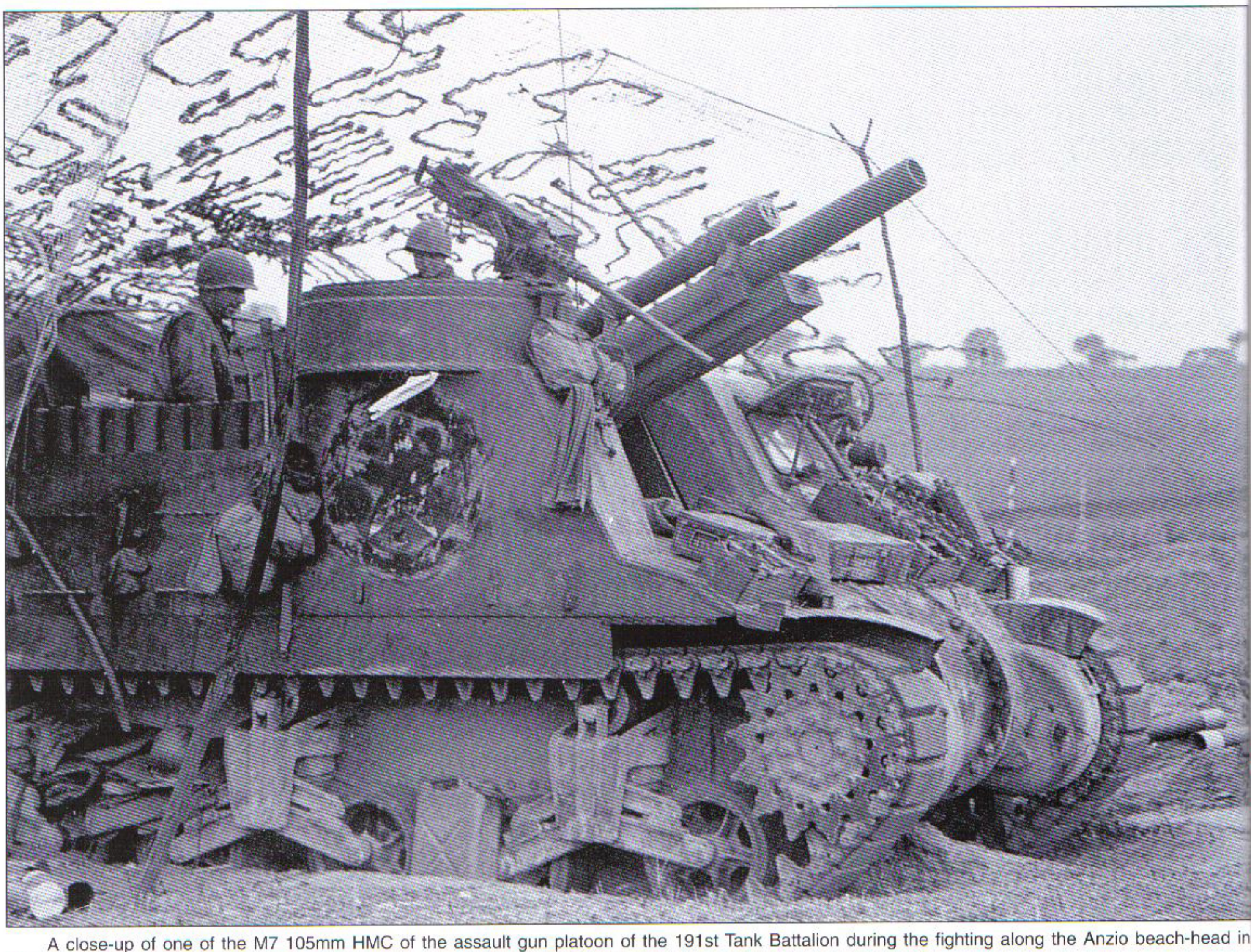
A battery of M7 105mm HMC from the assault gun platoon of the 191st Tank Battalion provide fire support for the 45th Division during fighting along the Anzio perimeter in February 1944. Until the advent of the M4 (105mm) assault gun later in 1944, the M7 105mm HMC was often substituted for it in the Italian theater.



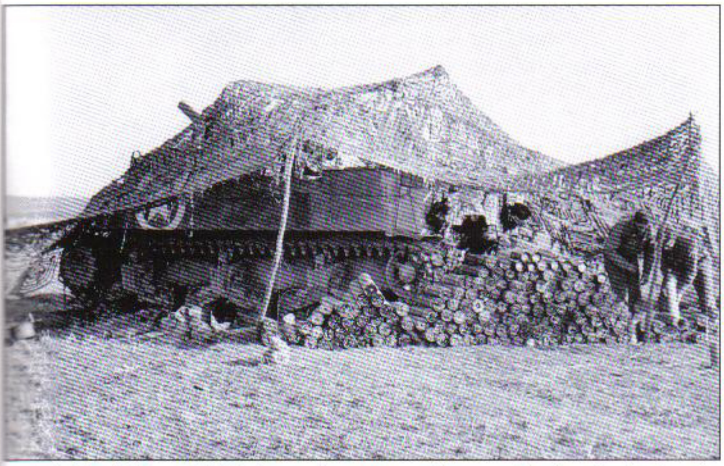
A M7 105mm HMC provides fire support for US Army operations near Cassino on 4 January 1944. As will be noted, this vehicle already has the field modification of a piece of armor welded to extend the side armor upward to cover the exposed side ammunition stowage.



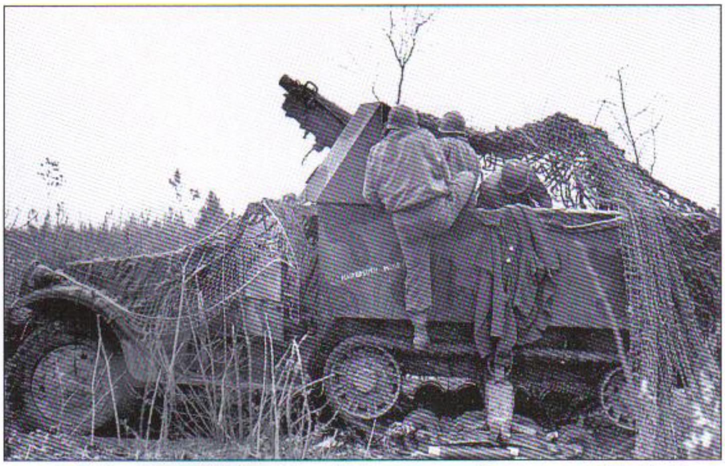
The crew of an M7 105mm HMC of the 69th AFAB take a breather during the fighting near Nettuno in the Anzio beach-head on 2 February 1944. The M7 105mm HMC is from the early production series with the one piece E4188 cast transmission cover.



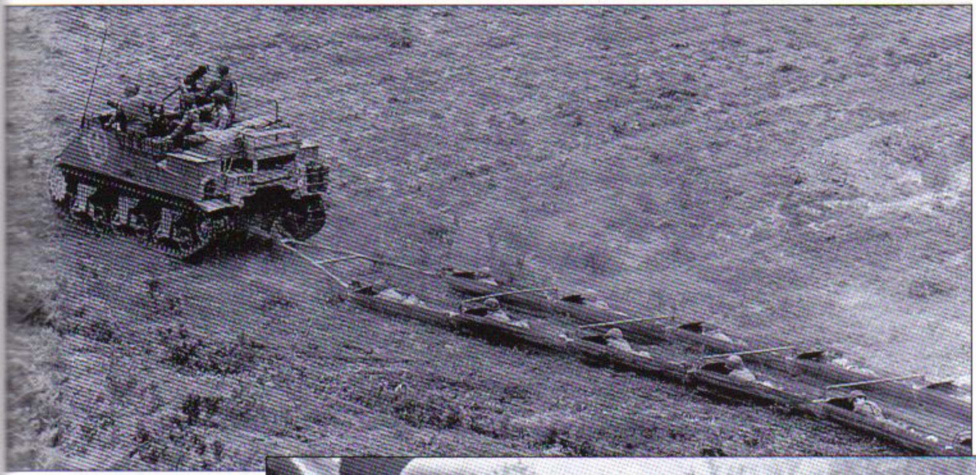
A close-up of one of the M7 105mm HMC of the assault gun platoon of the 191st Tank Battalion during the fighting along the Anzio beach-head in February 1944 while supporting 45th Division operations. The vehicle's star insignia has been crudely over-painted.



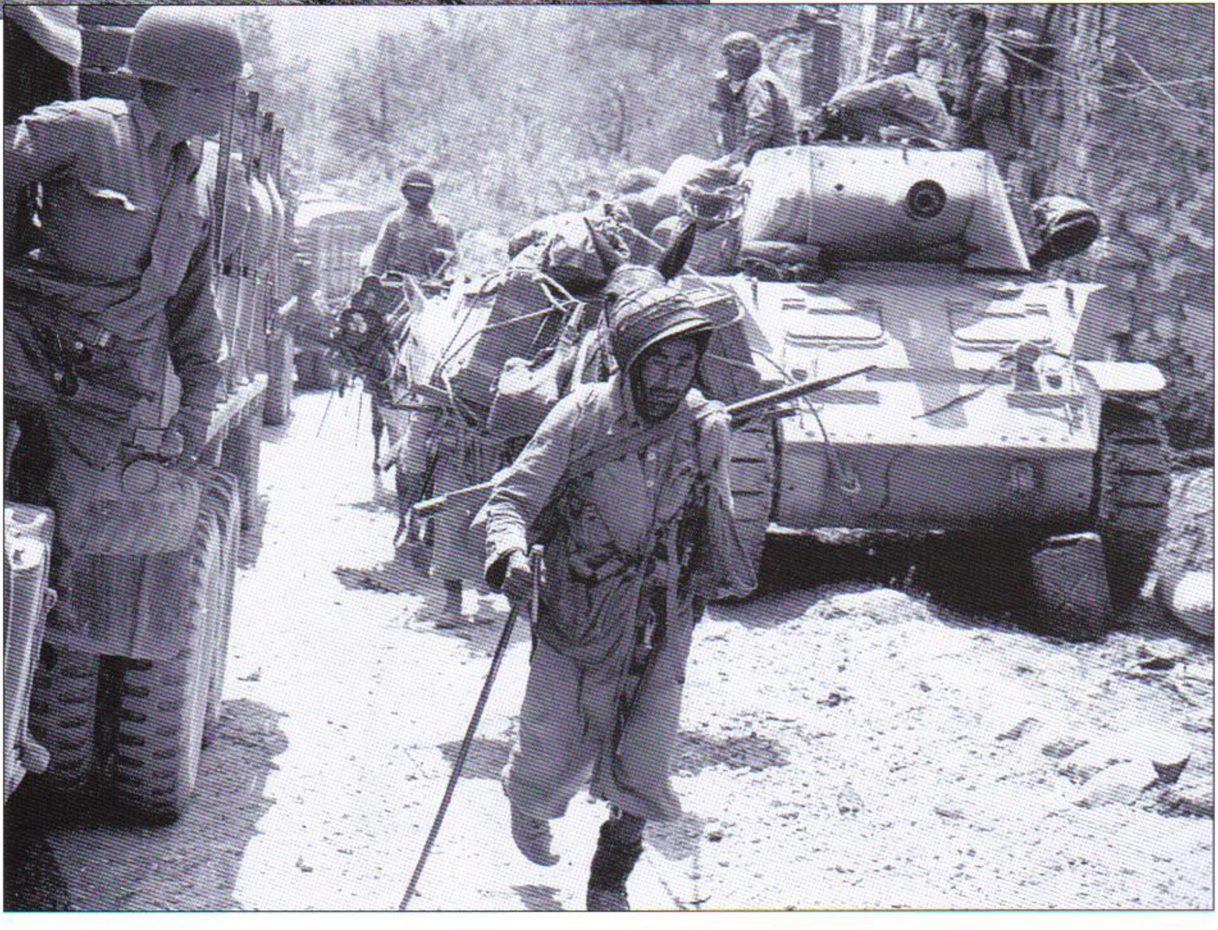
A M7 105mm HMC sits under a camouflage net in the Anzio beachhead with an ample supply of ammunition stacked behind it in the fiberboard shipping tubes.



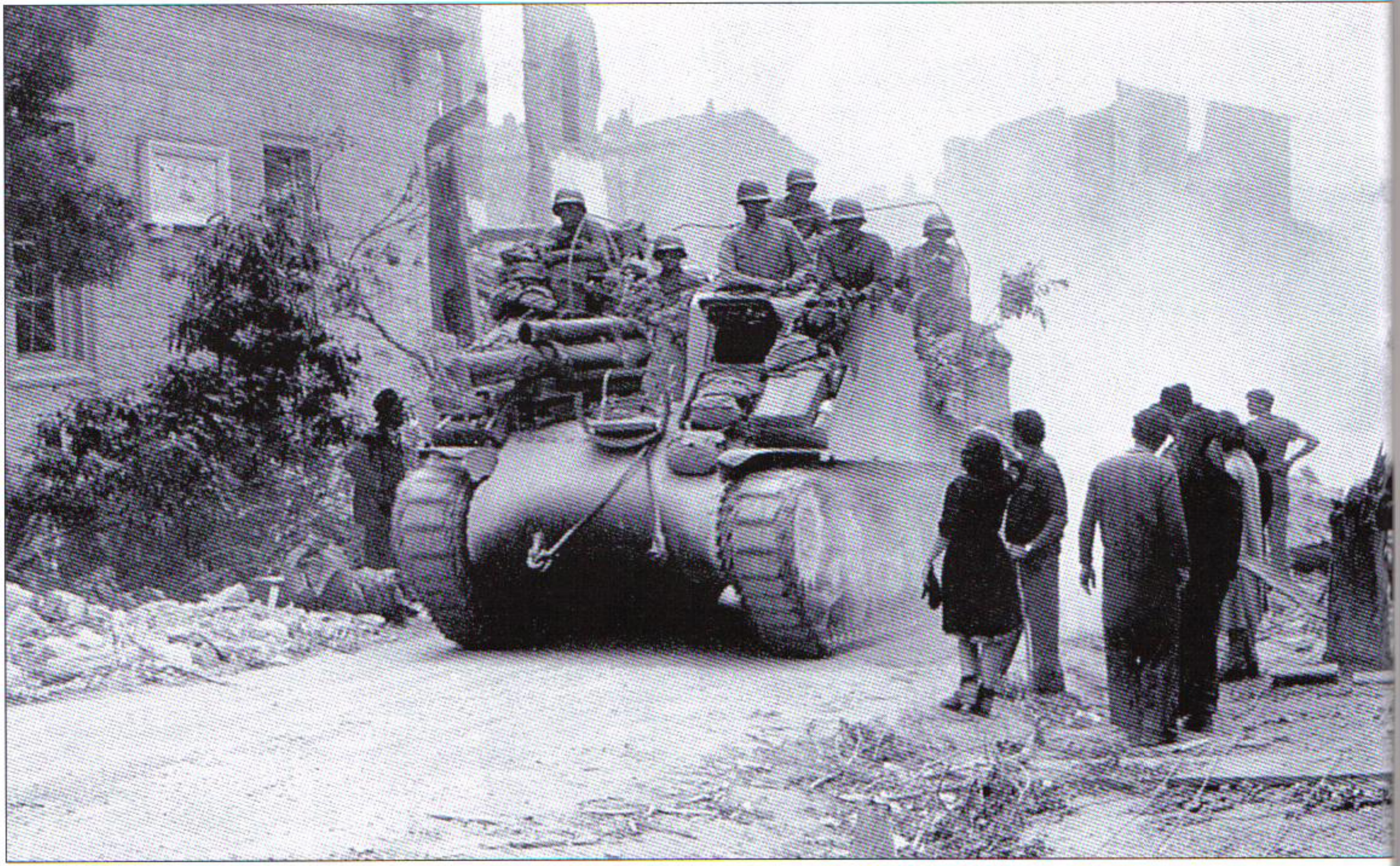
A T30 75mm HMC of the 179th Cannon Company, 45th Division, provides fire support during fighting along the Anzio perimeter on 8 March 1944. The T30 75mm HMC was still used in some infantry regiment cannon companies in Italy in 1944, though by this time, they had been replaced by towed howitzers in most divisions slated for the D-Day landings.



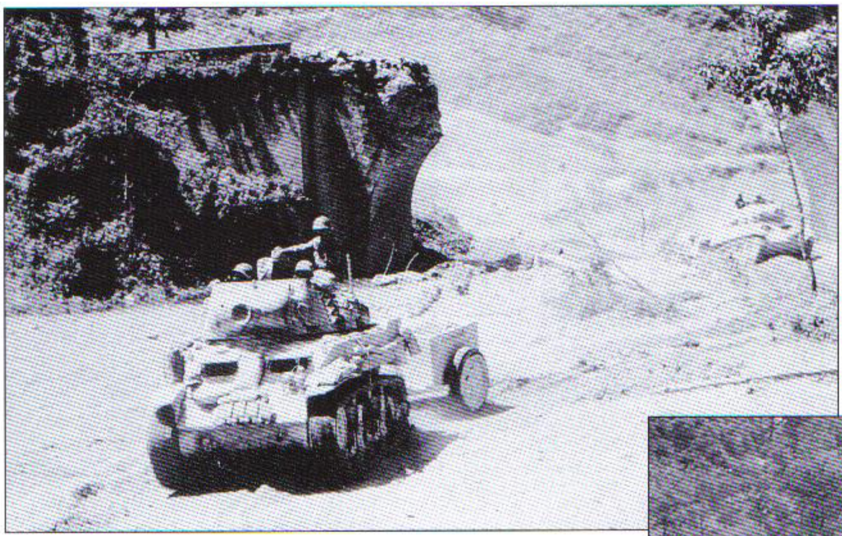
One of the more novel concepts attempted in the Anzio break-out was the "Battle Sled" idea pioneered by the commander of the 3rd Division, Gen. J.W. "Iron Mike" O'Daniel. These metal sleds were designed to be towed behind tanks or M7 105mm HMC as seen here to attack heavily protected objectives. This is during a training exercise on 9 May 1944.



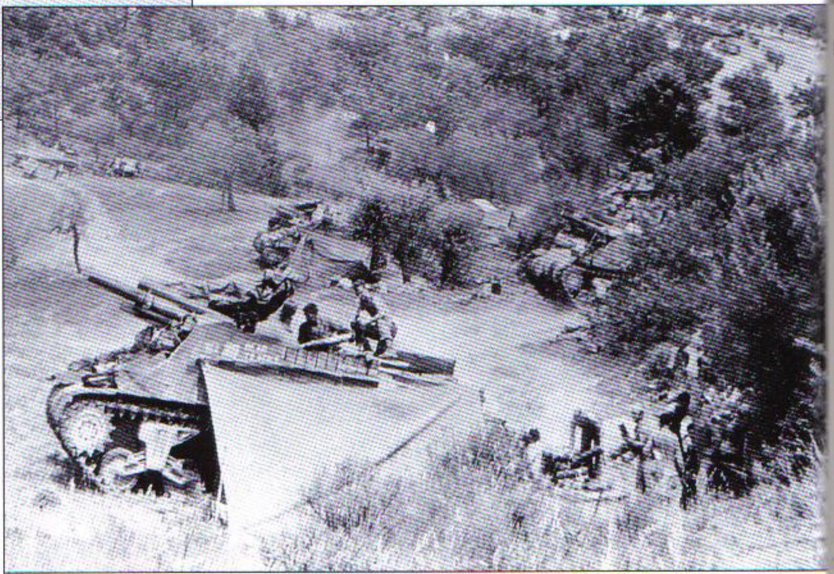
A French M8 75mm HMC sits by the roadside as troops from the 4th Moroccan Mountain Division move forward near Castelforte, Italy on 14 May 1944. The French units were raised in North Africa in 1943 and equipped along American lines.



A M7 105mm HMC enters Roccastrada, Italy on 24 June 1944. This vehicle has the E4188 transmission cover on the bow instead of the three piece cover, and both types were used on vehicles manufactured in 1942.

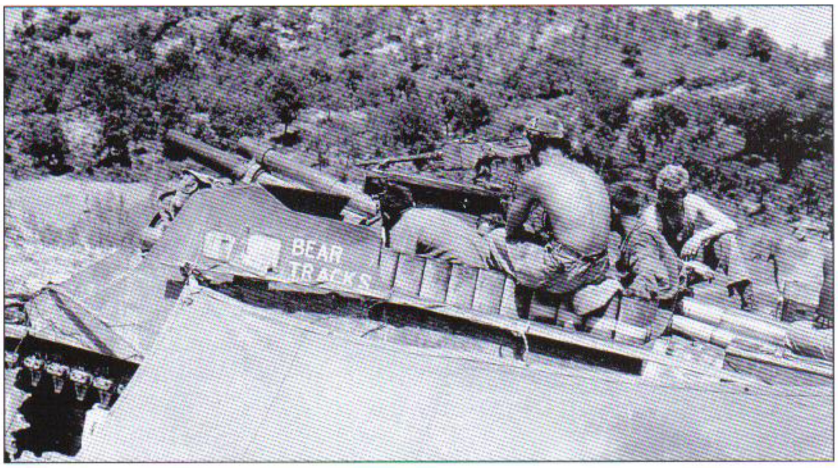


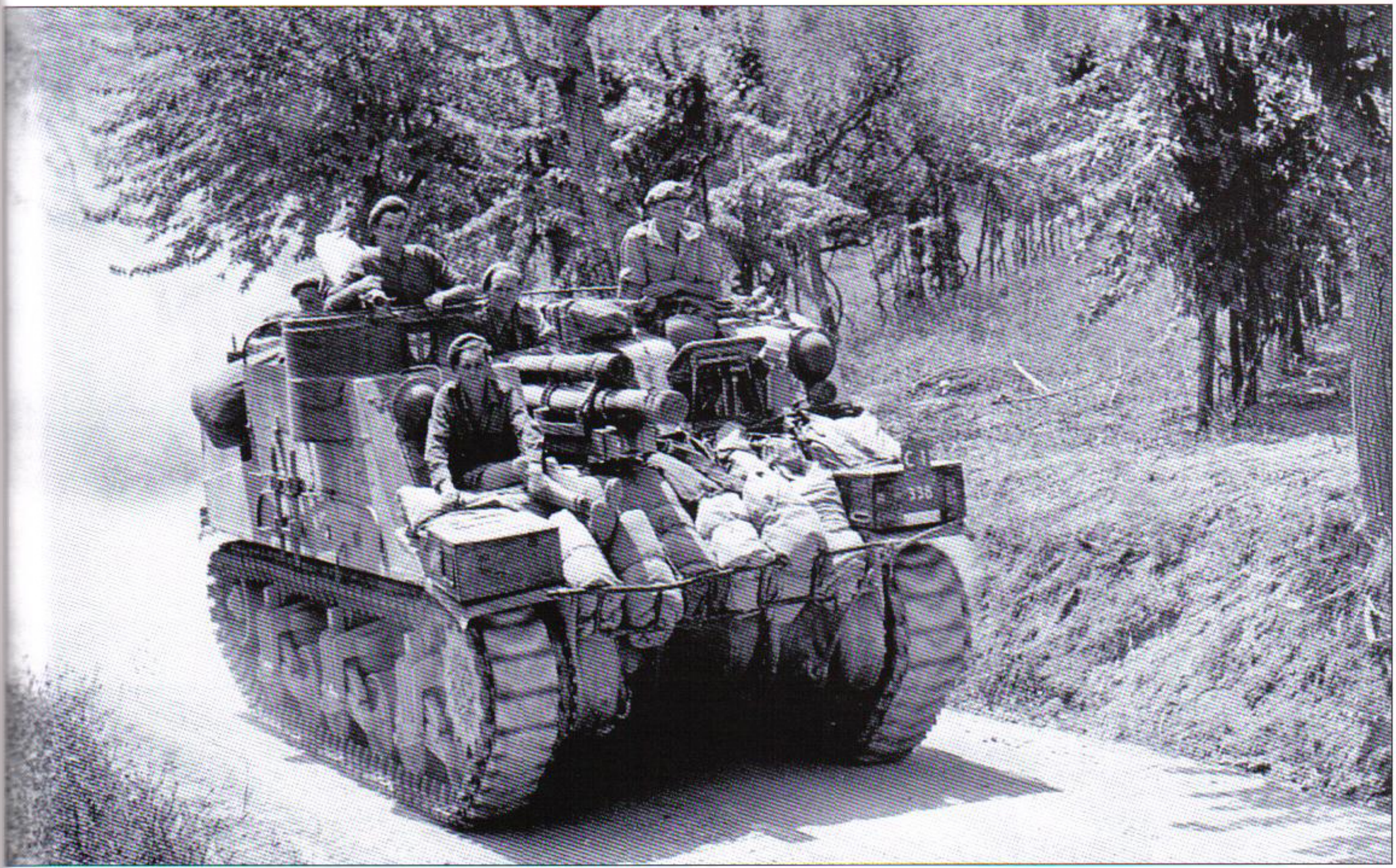
A pair of M8 75mm HMC move along a dry river bed nea Veiano, Italy on 8 June 1944. Both vehicles are towing th standard M8 armored trailer which could carry a further 9 rounds of 75mm ammunition.



A battery of M7 105mm HMC provides fire support from the woods in Mensanu, near Rome, during the fighting there on 2 July 1944.

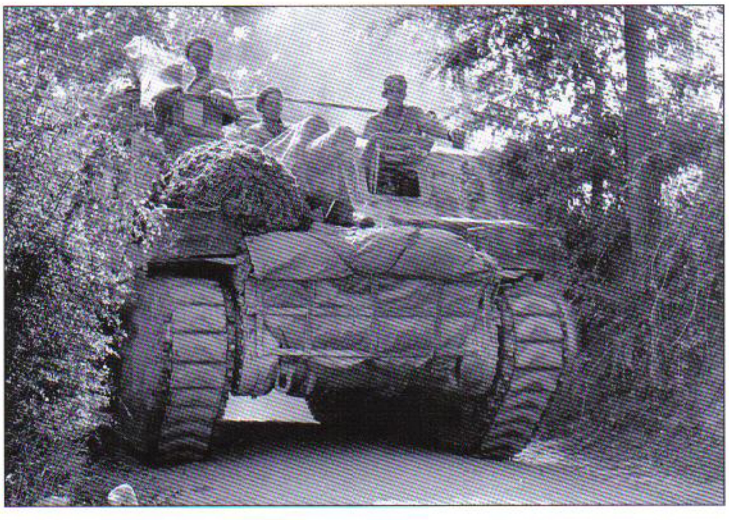
A close-up of one of the M7 105mm HMC near Mensanu named "Bear Tracks". As is evident from this view, the fiberboard containers used to transport the 105mm ammunition were partially exposed in their racks along the side, a reason for the later modification of the M7 105mm HMC with additional folding side plates.

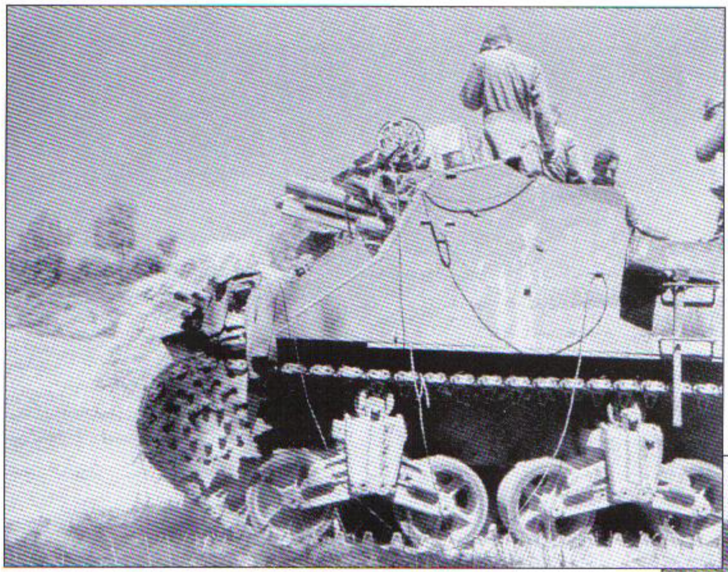




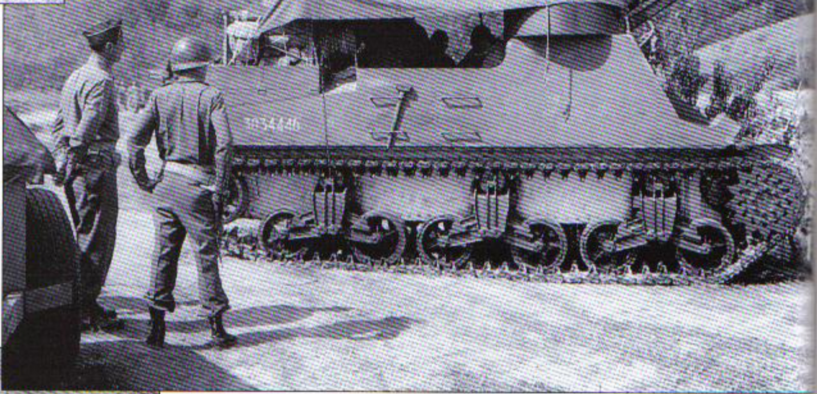
A Priest supporting the 1st Canadian Armoured Brigade during the fighting on the approaches to Florence in late June 1944. The marking on the left fender indicates this is a gun of C Battery.

Another Priest supporting the 1st Canadian Armoured Brigade near Florence at the end of June 1944. These vehicles are fitted with a frame over the transmission to permit stowage of tarps and other crew gear.

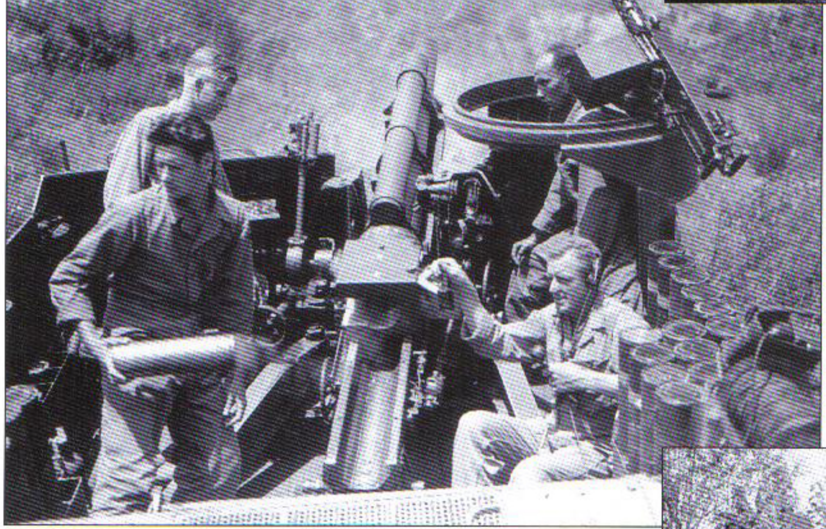




A M7 105mm HMC of Battery C, 68th AFAB provides fire support nea Monte Catini during the fighting on 5 July 1944. This is an 1942 productio M7 105mm HMC with the characteristic D37893 vertical volute sprin suspension as used on the M3 medium tank and the exposed sid ammunition racks. As on many M7 105mm HMC, there is a wire reel for fiel telephone wire used to connect the vehicle to the battery fire control cente

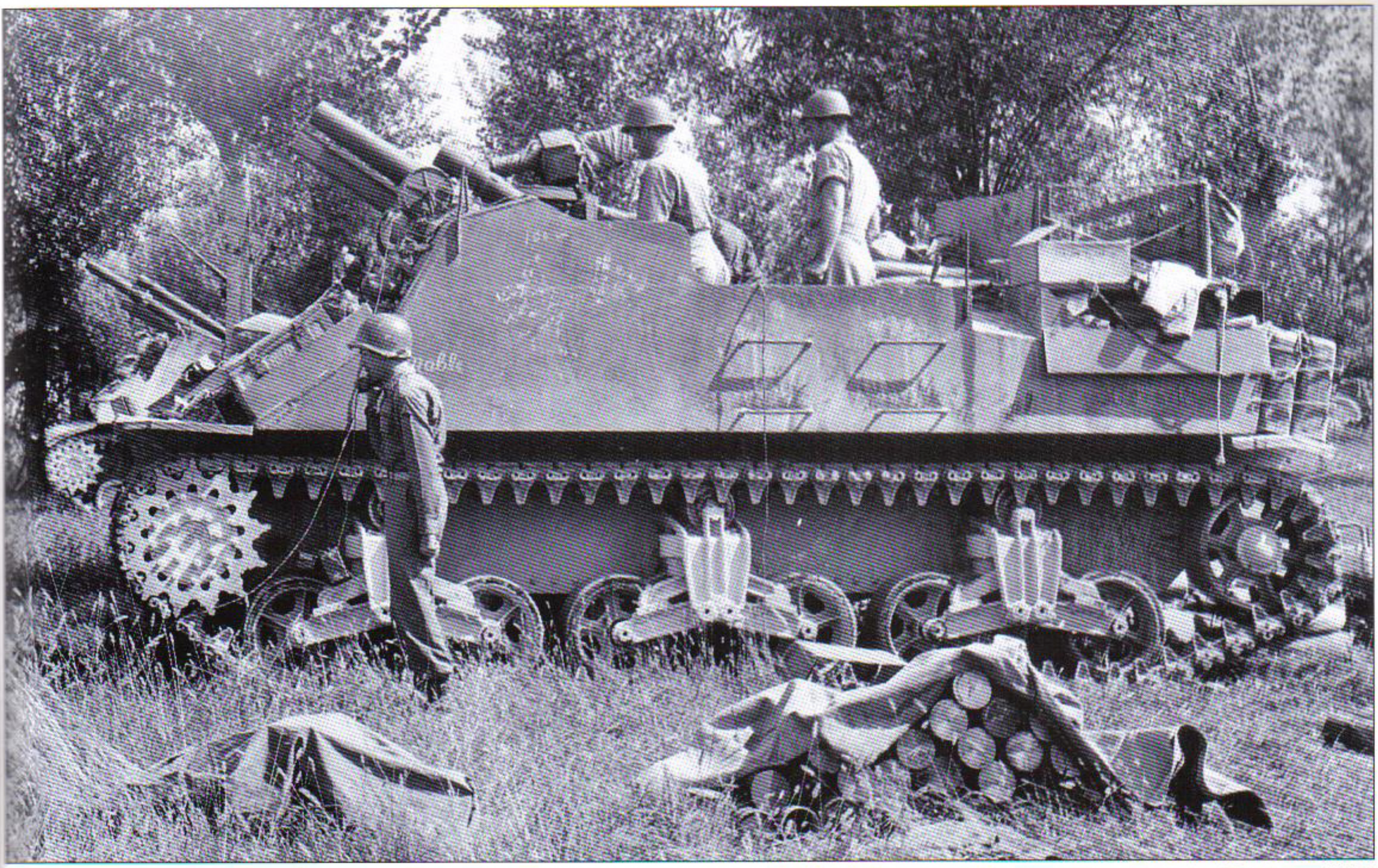


The commander of the Fifth Army, Gen. Mark Clark, watches while a M7 105mm HMC of the 91st AFAB conducts a fire mission north of Rome on 24 August 1944. This is one of the first series production vehicles manufactured in April 1942 with the side opening stowage bins on the rear. The lower hull sides have been painted white as a form of counter-shading camouflage.



The crew of a M7 105mm HMC of the 1st Armored Divisio during a fire mission on 29 August 1944. The crewman on the lef has extracted a brass propellant casing and is throwing it over the side while the crewman to the right wearing the field telephone headset keeps the breech open.

The crew of a M7 105mm HMC named "Off Limits" of Battery B, 91st AFAB, 1st Armored Division take a break during operation in Italy on 12 September 1944. This is a fairly typical M7 105mm HMC with the three piece transmission cover and early pattern suspension.

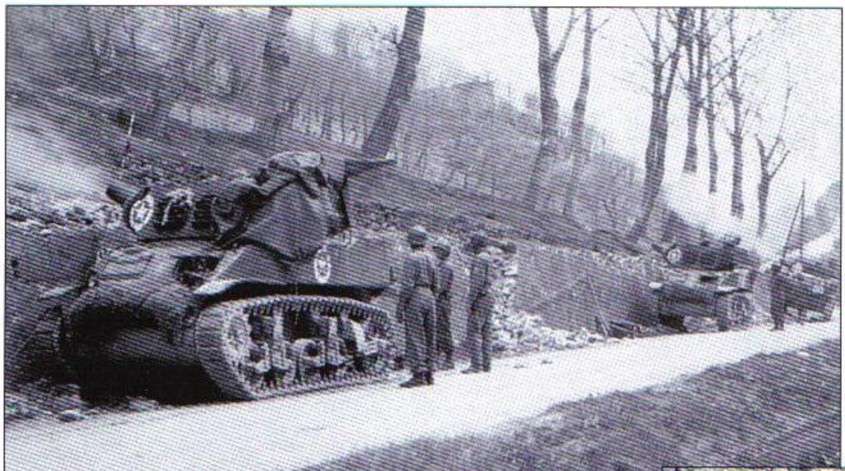


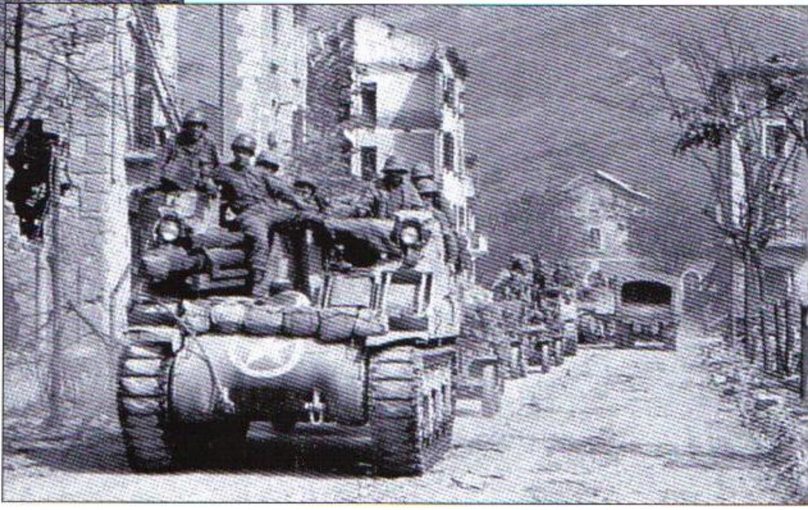
A battery of M7 105mm HMC conduct a fire support mission near Lucca, Italy on 16 September 1944. This is a very early production M7 105mm HMC distinguishable by the stowage bin on the rear deck which opens sideward.

The crew of a M7 105mm HMC warm up around a fire in the hills near Casteluccio, Italy on 28 November 1944. Many M7 105mm HMC crews in Italy used the vehicle's canvas tarp to provide cover on hot or rainy days to shelter the fighting compartment.

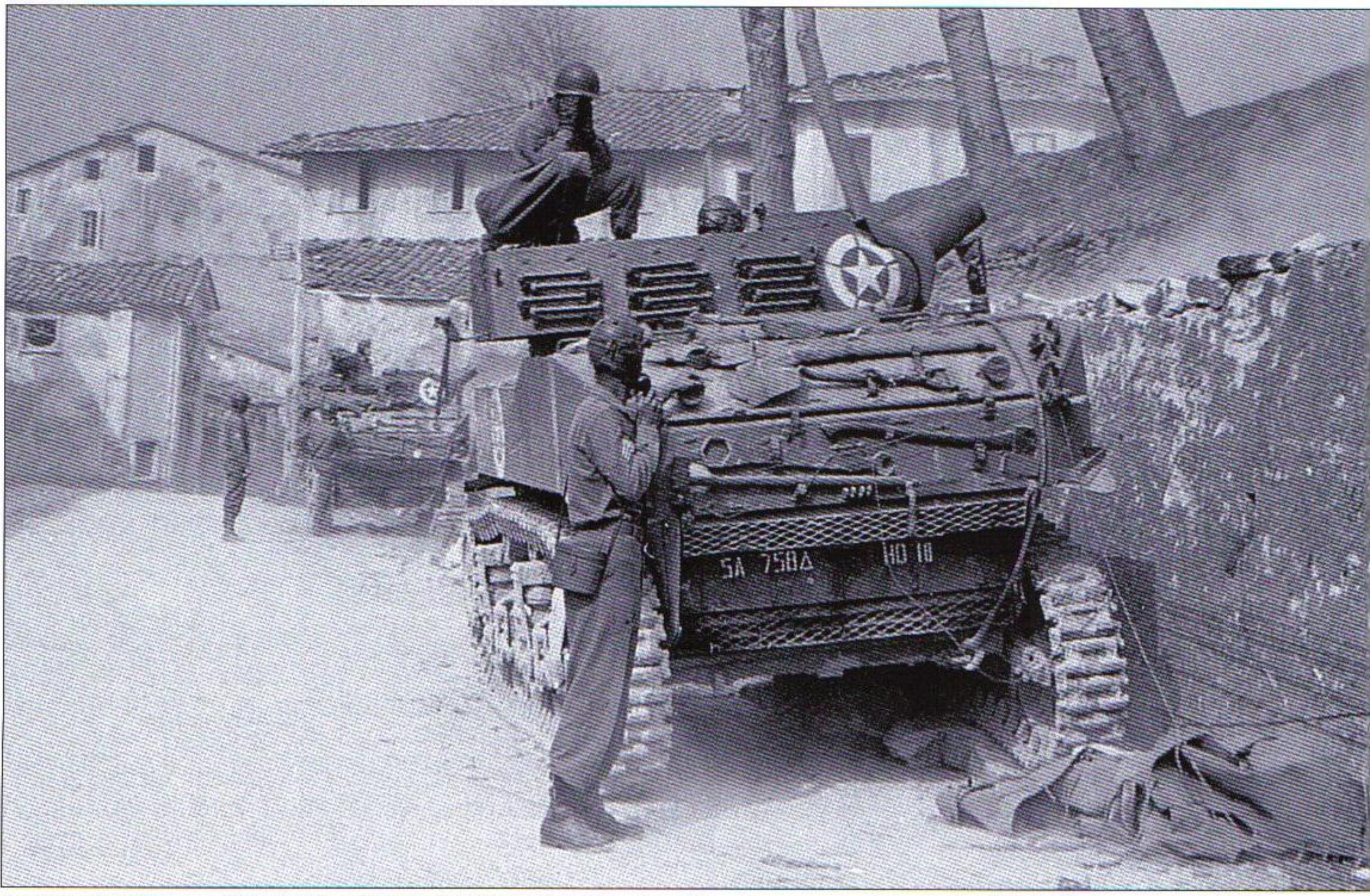
A M7 105mm HMC passes by a group of GIs decorating a Christmas tree on 20 December 1944 in Collina, Italy.

A M7 105mm HMC of the 1st Armored Division move through the shattered streets of Vergato, Italy during April 1945. These are probably vehicles of the 27th AFAB whic supported the division's 81st Cavalry Reconnaissanc Squadron during the storming of the town on 14-15 Augus 1945.



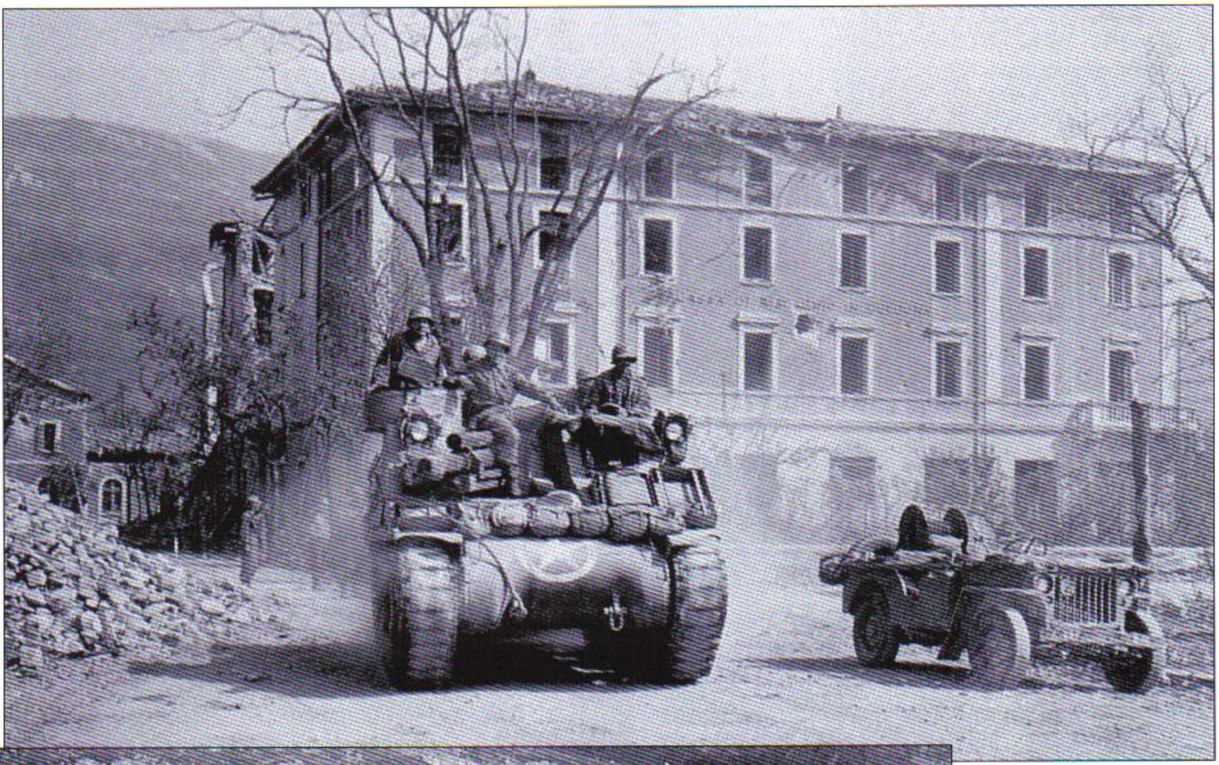


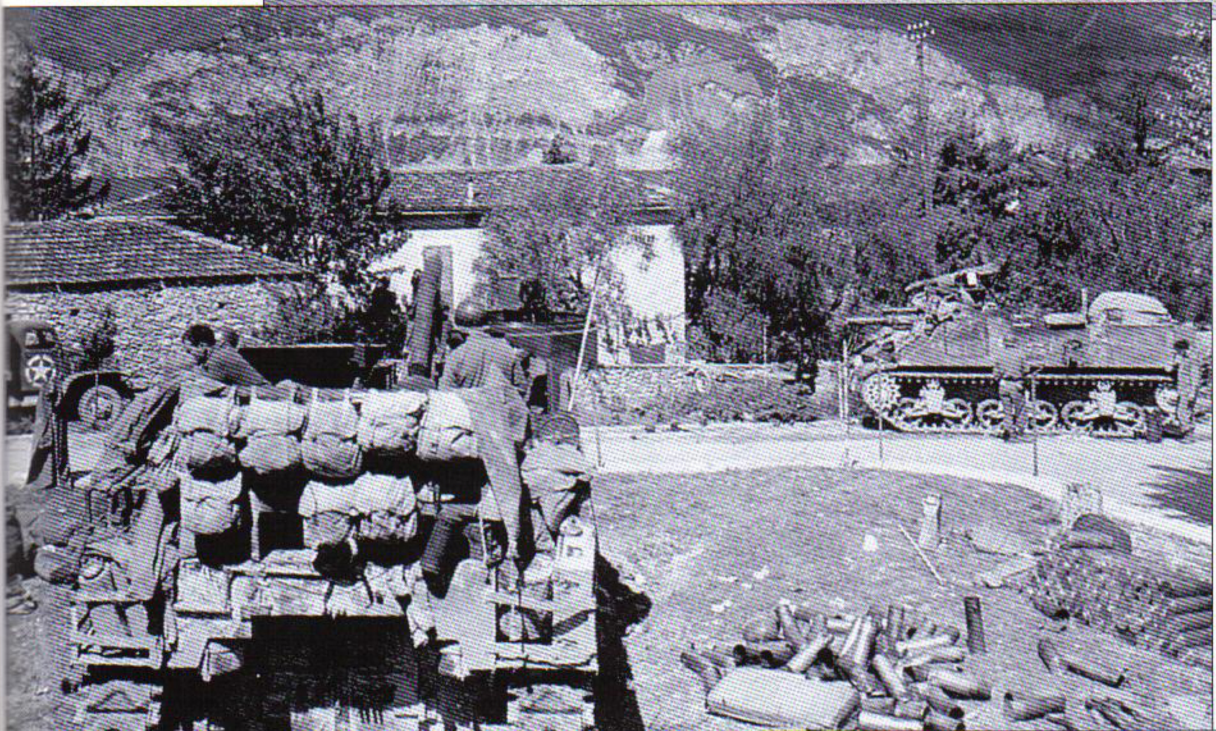
The M8 75mm HMC of the assault gun platoon of the 758th Tank Battalion provide fire support for the 442nd Infantry Regiment (Nisei) during the fighting for Seravezza, Italy on 8 April 1945. The 758th was a segregated African American tank battalion, one of two in the Italian theater, and one of the last US Army tank battalions still configured as a light tank battalion. Since light tank battalions were based around the M5 light tanks, the M8 was used as the assault gun in the headquarters company instead of the M4 (105mm).



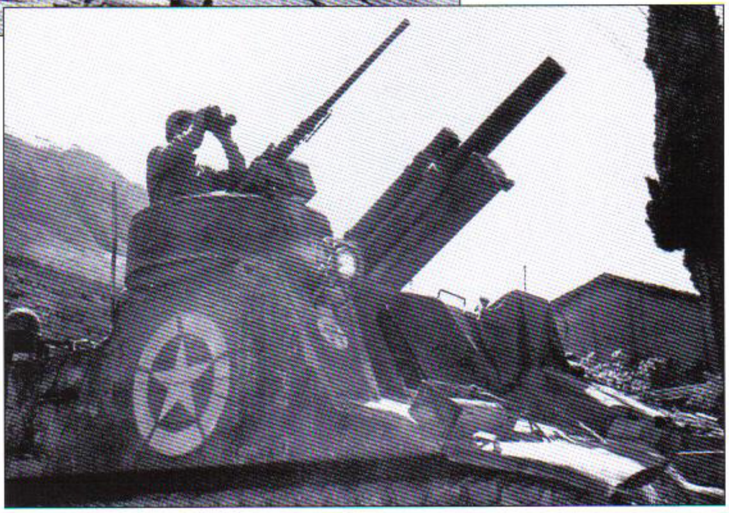
Another view of the assault gun platoon from the 758th Tank Battalion conducting a fire support mission for the 442nd Infantry on 8 April 1945.

Another view of a M7 105mm HMC of the 1st Armored Division in Vergato, Italy in April 1945.

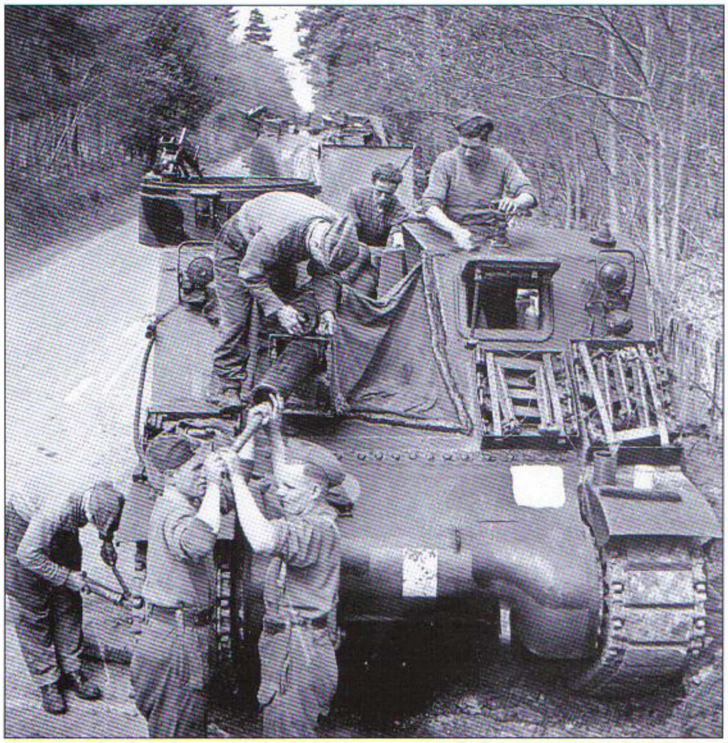


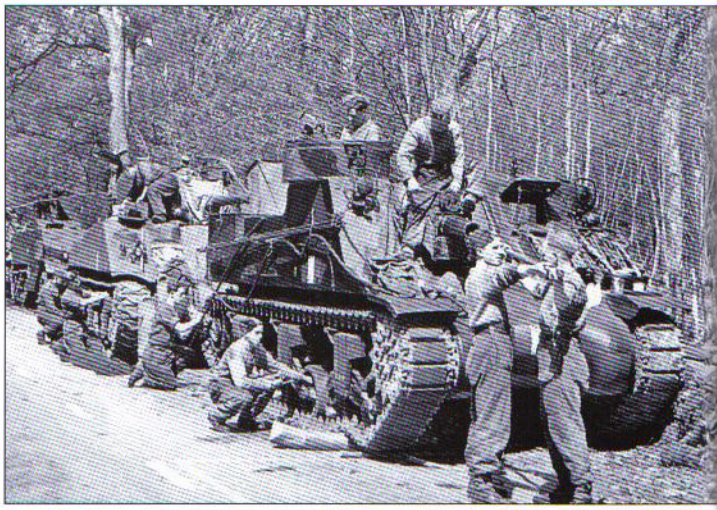


A heavily stowed M7 105mm HMC of Battery A, 1125th AFAB takes part in a fire mission near Lake Garda, Italy on 29 April 1945. Due to the amount of stowage, many crews created a table between the two side stowage boxes over the engine deck to prevent the stowage from interfering with the air intakes on the engine deck.



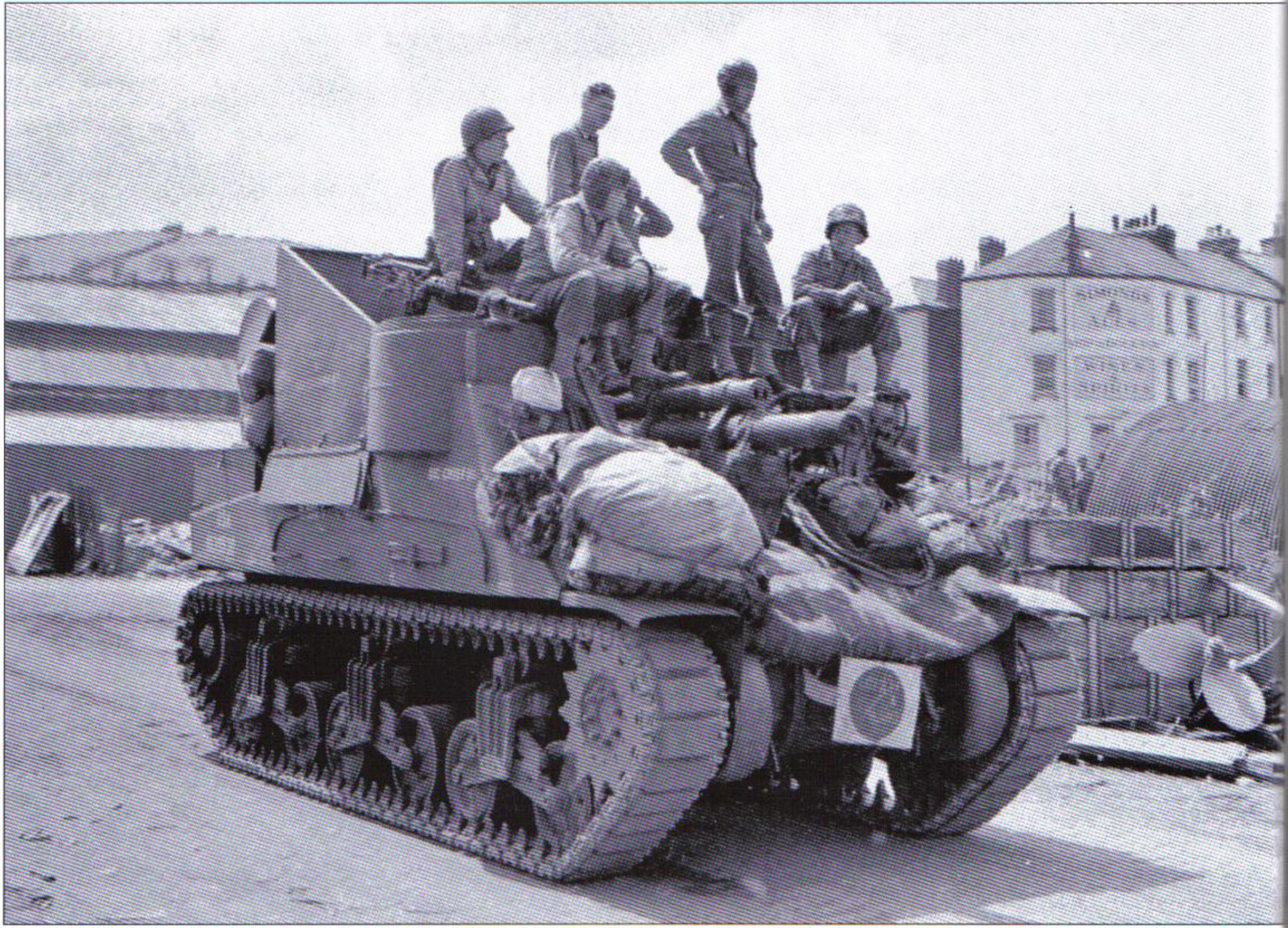
Another view of a M7 105mm HMC of Battery A, 1125th AFAB during the fighting near Lake Garda on 30 April 1945. The yellow bridging circle marking below the headlight is split giving the weight of the vehicle with and without its ammunition trailer.



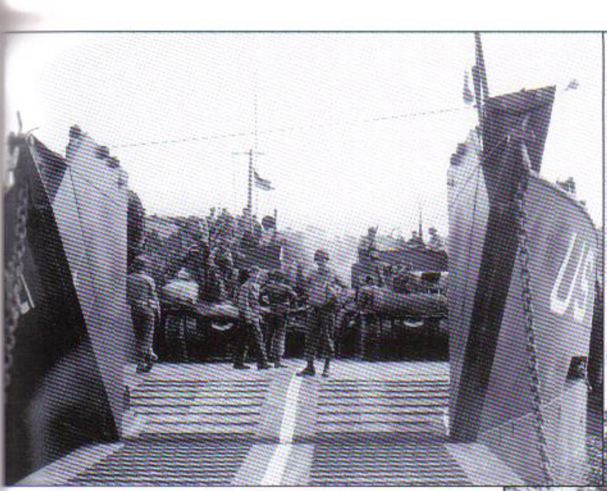


Another view of an armored training unit in the UK in May 1944 with a Priest in the foreground followed by a Sherman tank and a half-track. (NARA)

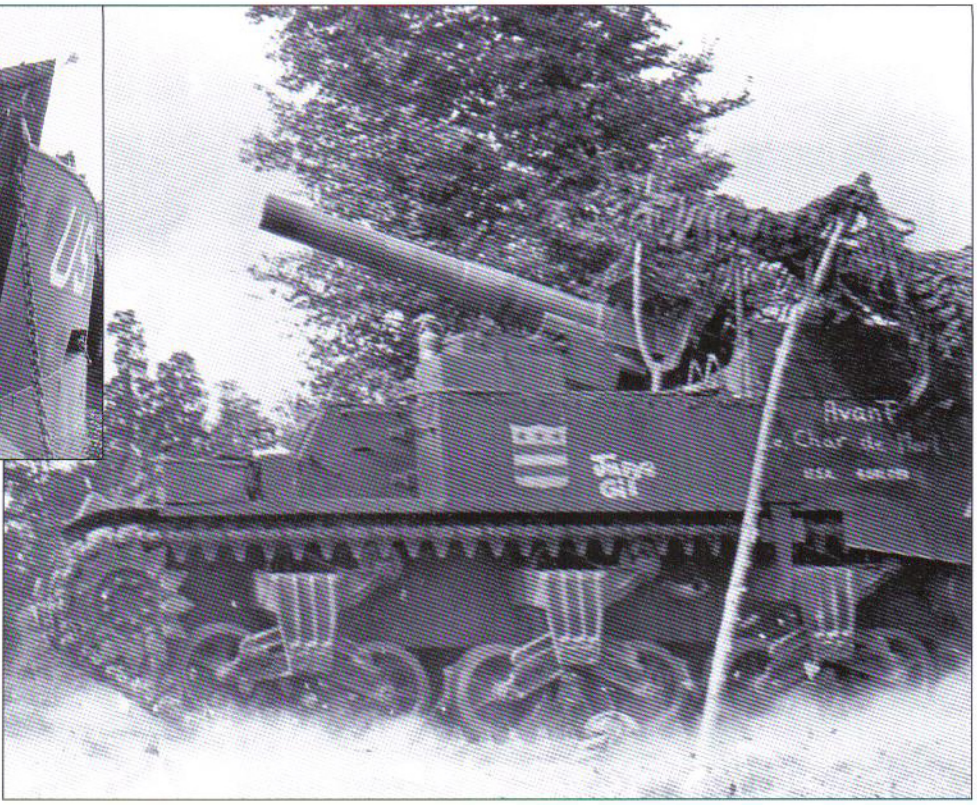
The British army made little use of the M7 105mm HMC Priest in northwest Europe, preferring to standardize on the related Sexton 25 pdr. However, some were still used by training units in the UK as seen here in May 1944. This is a spring-summer 1942 production vehicle with the one-piece E4188 transmission cover. (NARA)



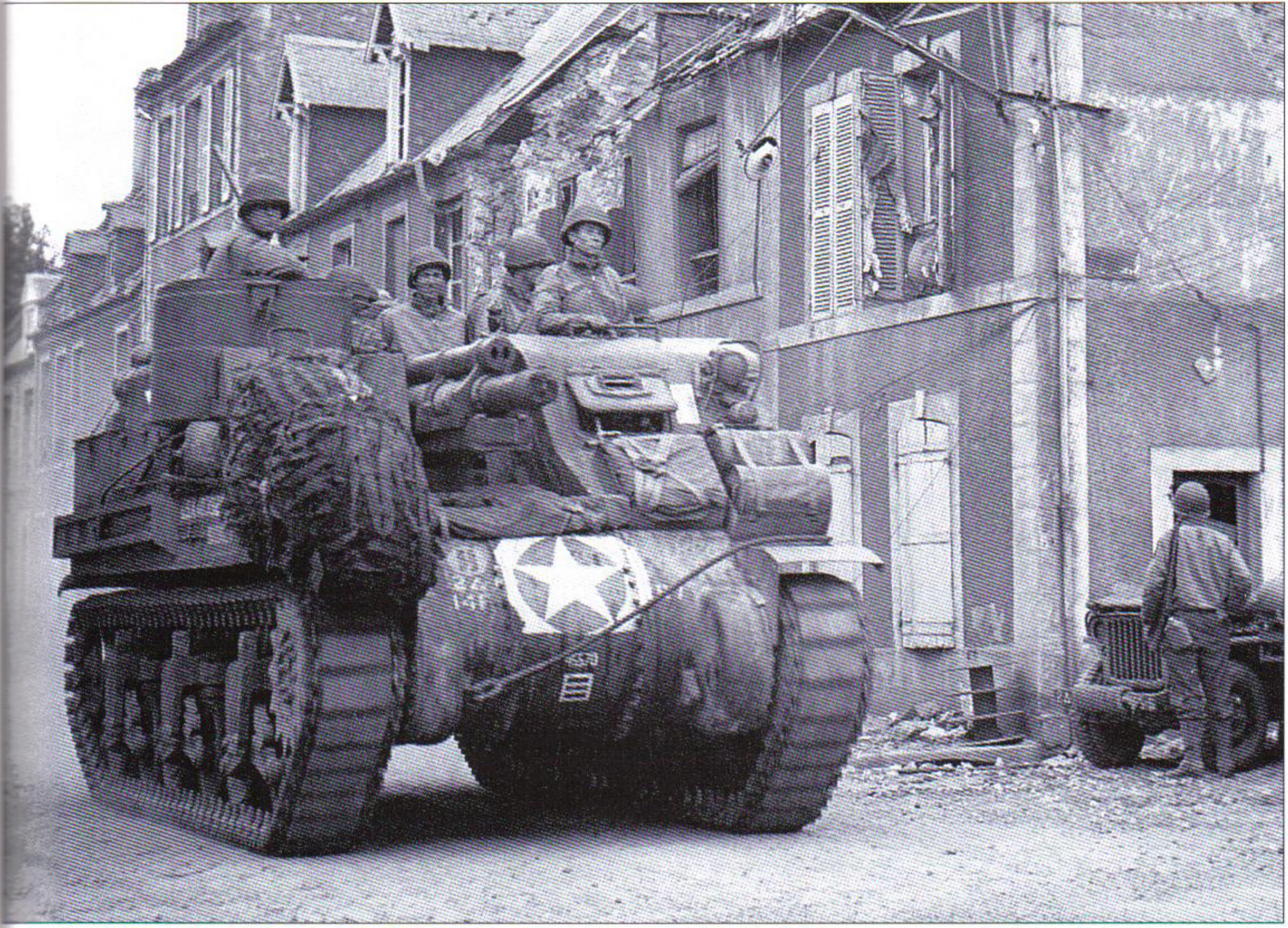
A M7 105mm HMC nicknamed "Big Chief III" of Battery B, 42nd AFAB, is prepared for the D-Day landings at Portsmouth on 1 June 1944. The vehicle has had a fording screen erected around the fighting compartment and a set of wading trunks fitted at the rear to enable it to be driven to shore through the surf to a depth of about ten feet.



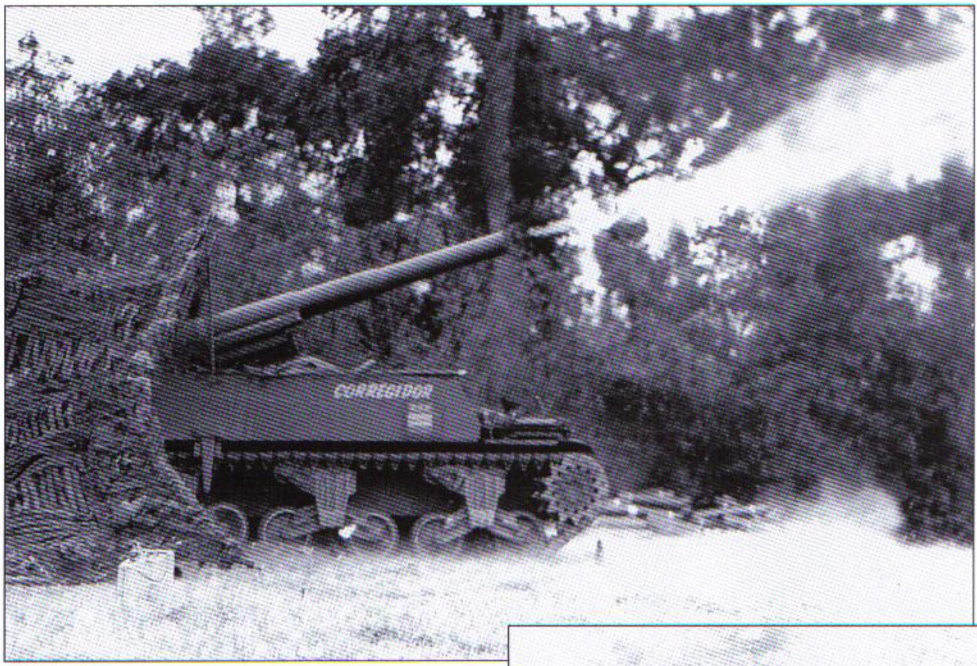
A captain signals another M7 105mm HMC while loading an LCT in Britain prior to the D-Day landings. The M7 105mm HMCs are fitted for deep wading, and both have large camouflage nets rolled up and stowed on their bows.



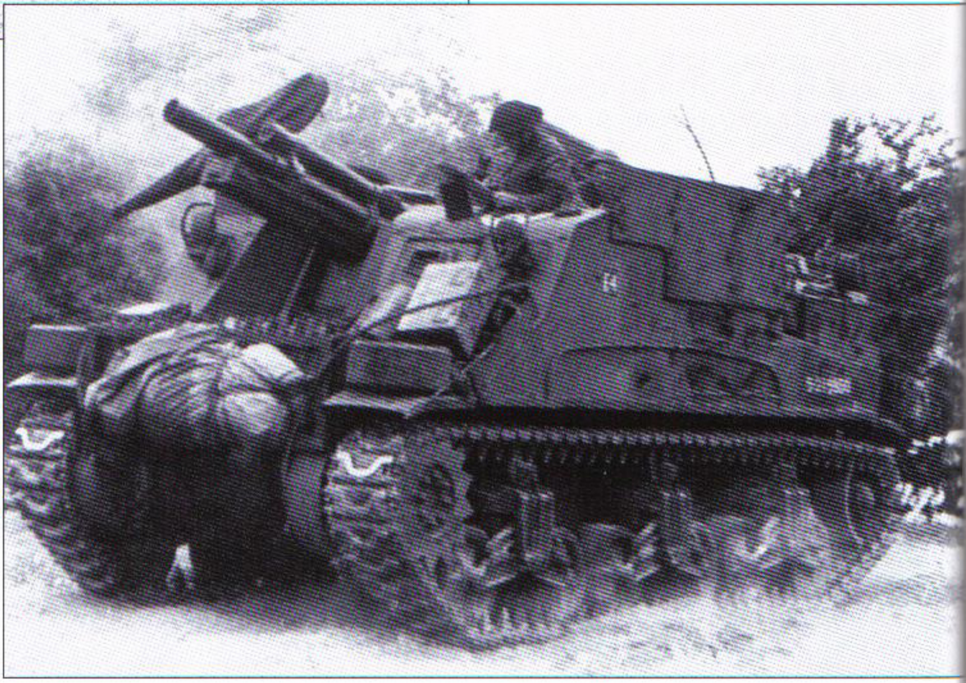
A M12 155mm GMC of the 991st AFAB named "June Gil" in action on 16 July during the St. Lo fighting. The French inscription on the hull side: "Avant le char de mort!" means "Forward tank of death!".



A M7 105mm HMC of Battery B, 14th AFAB, 2nd Armored Division, moves through Carentan on 18 June 1944. This vehicle is the intermediate production type with the deeper pulpit introduced in January 1943. The 2nd Armored Division added stowage racks on the hull side, much like those on half-tracks.



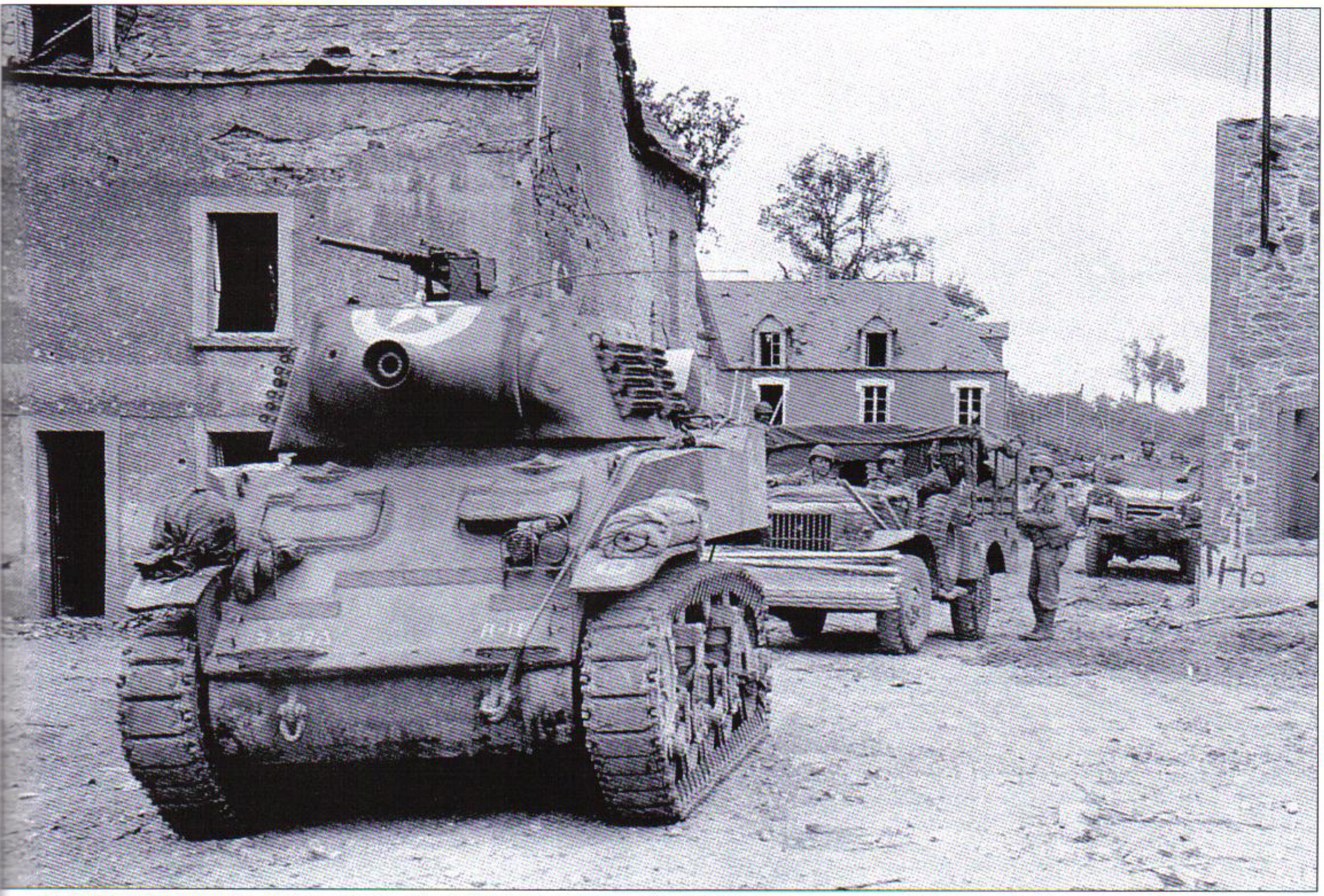
"Corregidor", a M12 155mm GMC from the 991st Field Artillery Battalion, fires on targets near St. Lo, France on 16 July 1944, two days after the battalion entered combat. The 991st was a descendent of the famous "Washington Greys" regiment, and continued the unit traditions with its shield insignia seen painted on the superstructure sides.



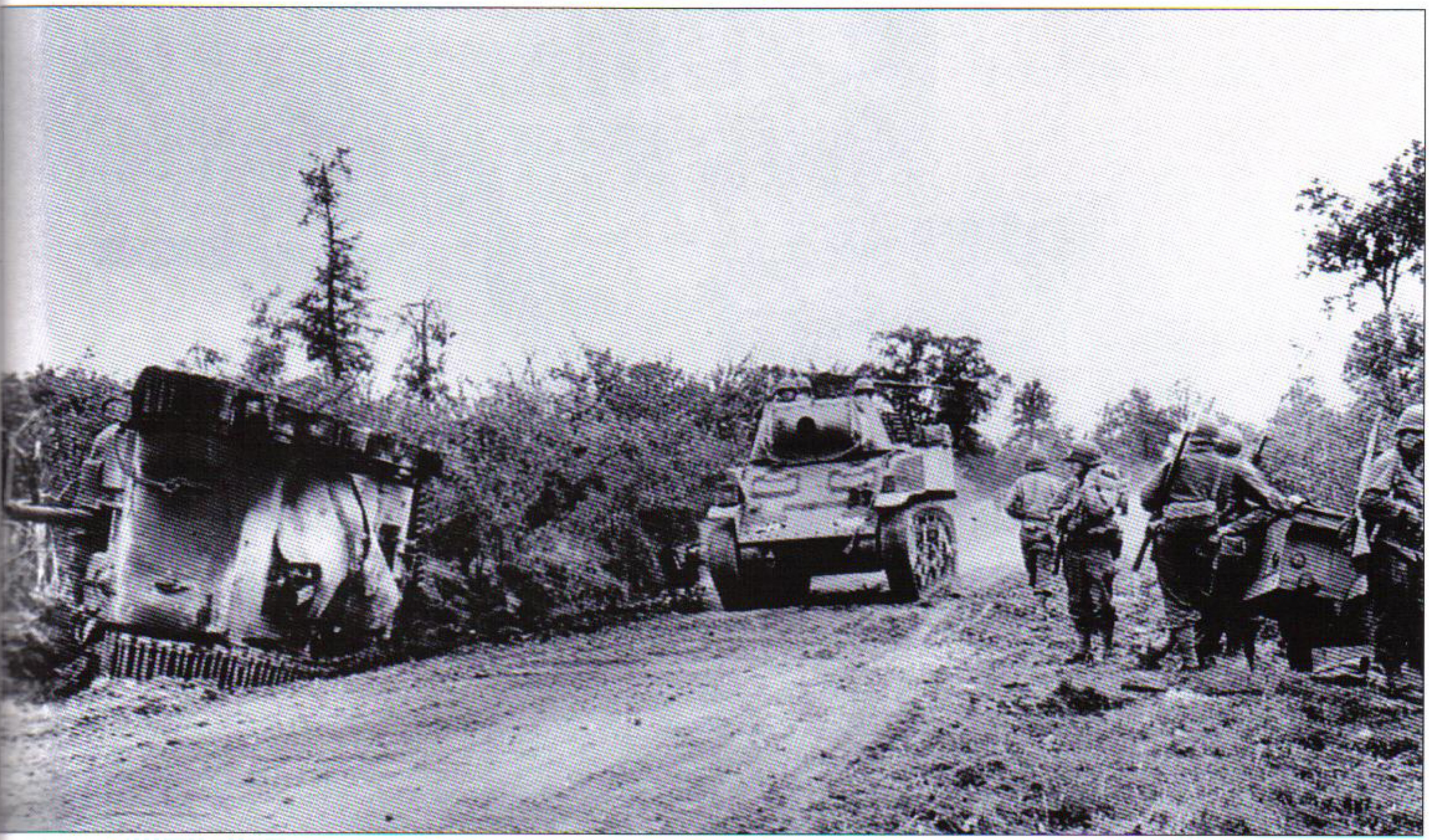
A Canadian Priest of the 13th Field Regiment Royal Canadian Artillery is seen here in action near Caen during the 18 July artillery preparation for Goodwood. It is still fitted with the side panels for deep wading; they were probably retained to provide some modest anti-sniper protection. The standard Royal Artillery tactical marking on the superstructure side, a blue square with a smaller red square in the lower left corner, indicates a howitzer of 3 Battery, the white E4 indicates the 4th howitzer of E Troop. Some Priests were "defrocked" later in the Normandy campaign to serve as Kangaroo infantry transporters. (NARA)

A Priest of the 13th Field Regiment Royal Canadian Artillery conducts fire missions in Normandy in July 1944. This vehicle has the distinctive front stowage racks frequently seen on Canadian Priests. There were two Canadian Priest units in Normandy, the 13th and 14th Fd Regt RCA, but both later converted to towed 25 pdrs. (NARA)

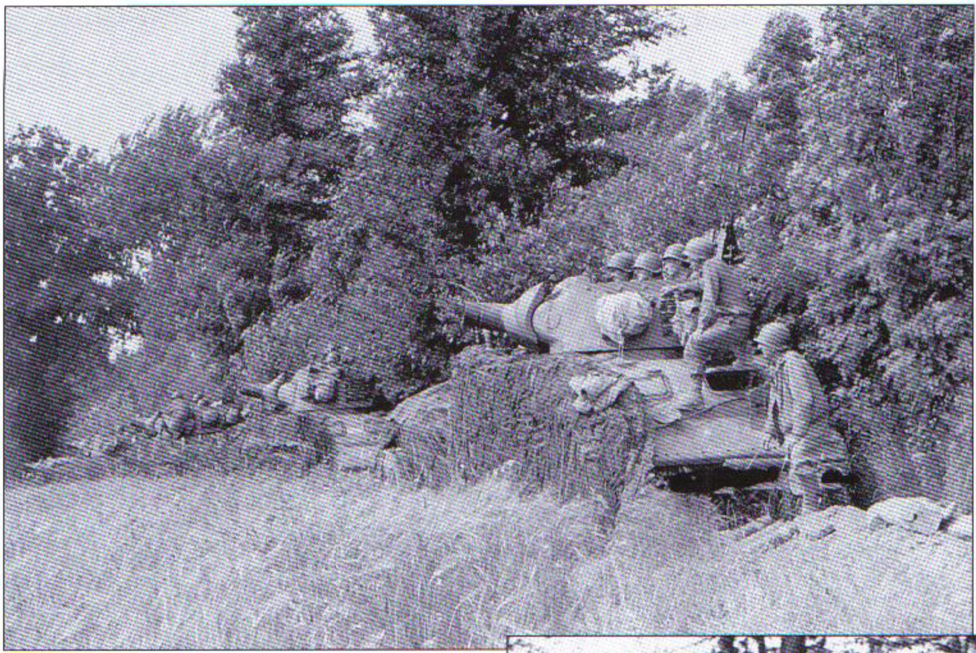
Another view of a Priest of the 13th Fd Regt RCA during the Normand campaign but from the rear showing the placement of the side panels Although Canadian forces had 124 25 pdr. Sextons in England in late 1943 all but 32 were turned over to British forces. Three Canadian units used the Sexton, the 8th, 19th and 23rd Fd Regts. Serving with the 4th and 5th Armoured Divisions. (NARA)



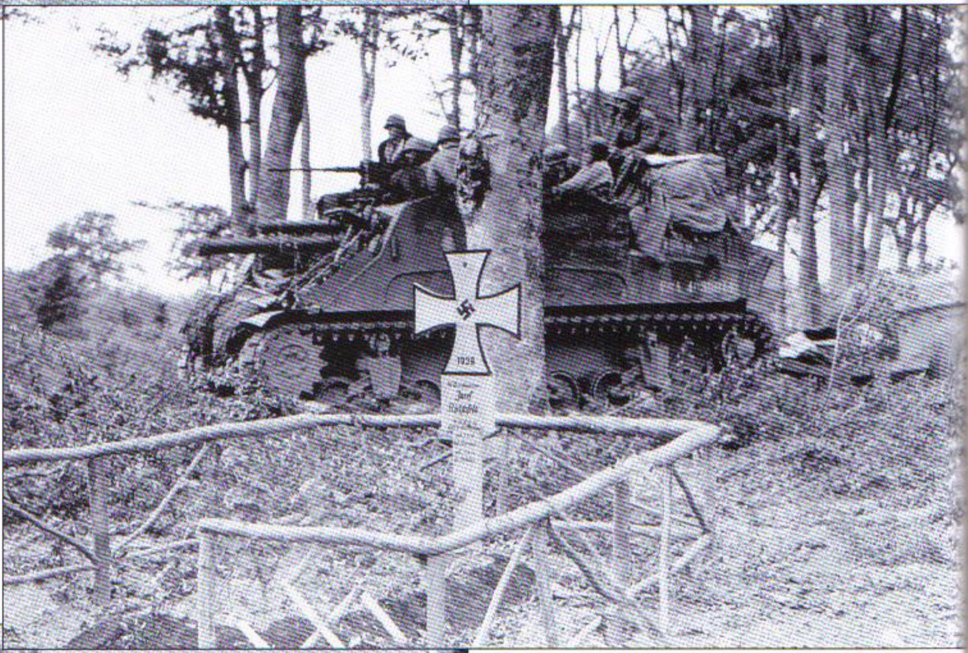
A M8 75mm HMC leads a column from the reconnaissance company of the 33rd Armored Regiment, 3rd Armored Division at Montreuil-sur-Lozon on 26 July during Operation Cobra. The CCB of the 3rd Armored Division was committed that day to support the attack of the 1st Infantry Division.



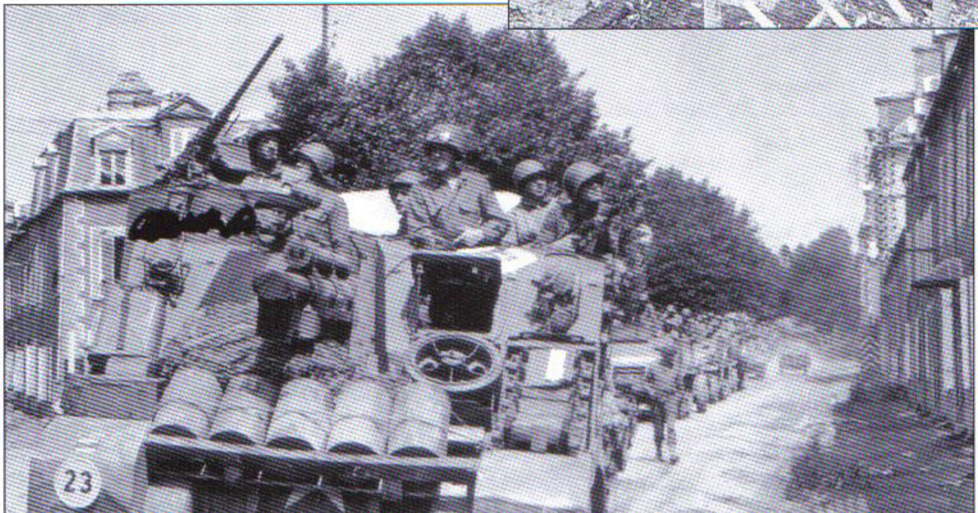
A day after the start of Operation Cobra, a M8 75mm HMC of the 3rd Armored Division passes by the wreckage of an overturned M4 tank near Marigny. The M4 has suffered an internal ammunition fire which has blown out floor panels.



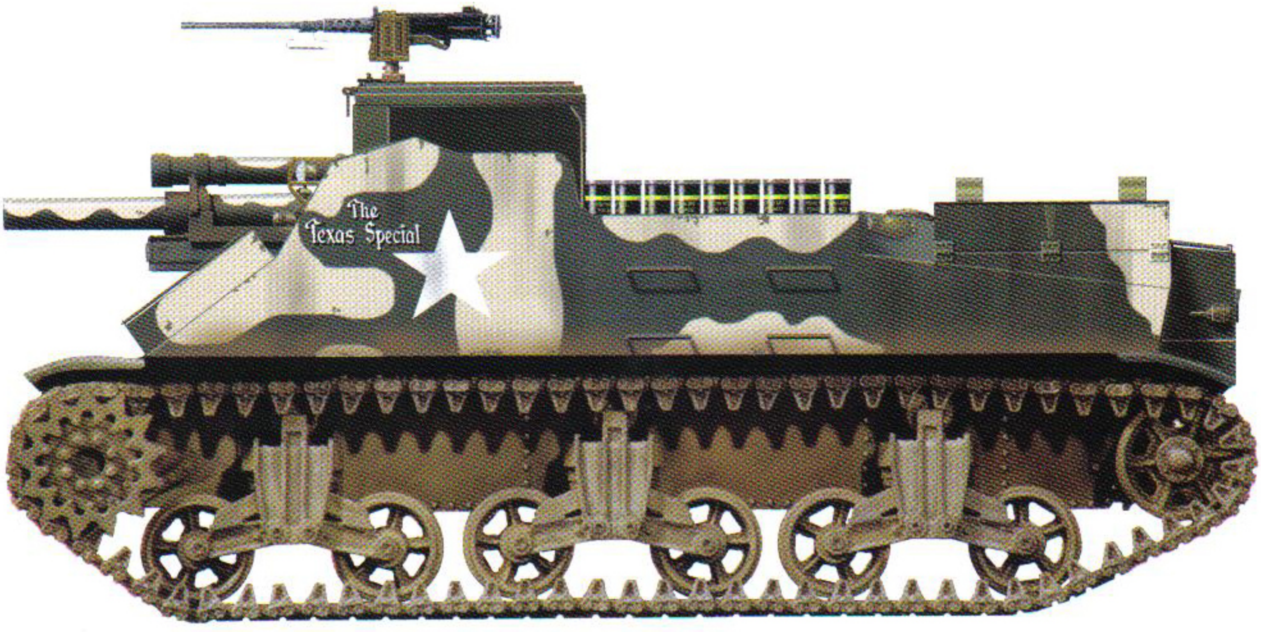
A company of M8 75mm HMC from the 3rd Armored Division take up firing positions along a tree line near Marigny on 28 July 1944 during Operation Cobra. The censor has covered over the front details of the lead vehicle, obscuring the hedge-row cutter on the bow which was considered a big secret at the time.



A M7 105mm HMC towing a M8 armored trailer passes by a cemetery near St. Gilles, France on 29 July 1944 with the grave of a German SS officer in the foreground. When carrying 105mm ammunition, the M8 trailer could contain 42 rounds.

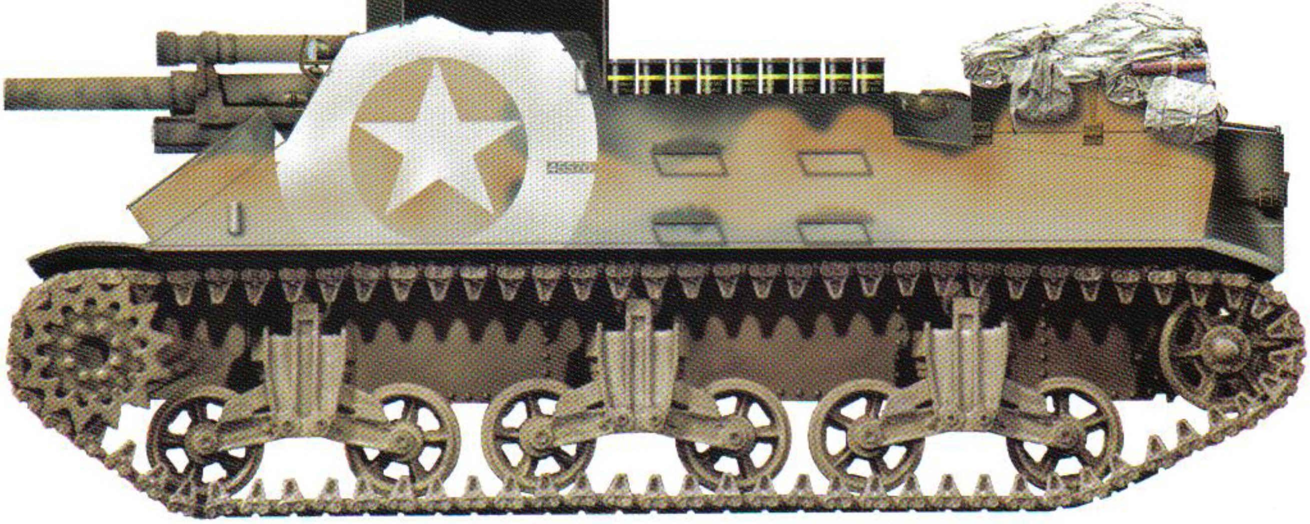


A M7 105mm HMC, probably from the 4th Armored Division, leads an armored infantry column through Coutances during Operation Cobra on 30 July 1944. The crew has rigged a stowage rack on the front holding five oil cans.



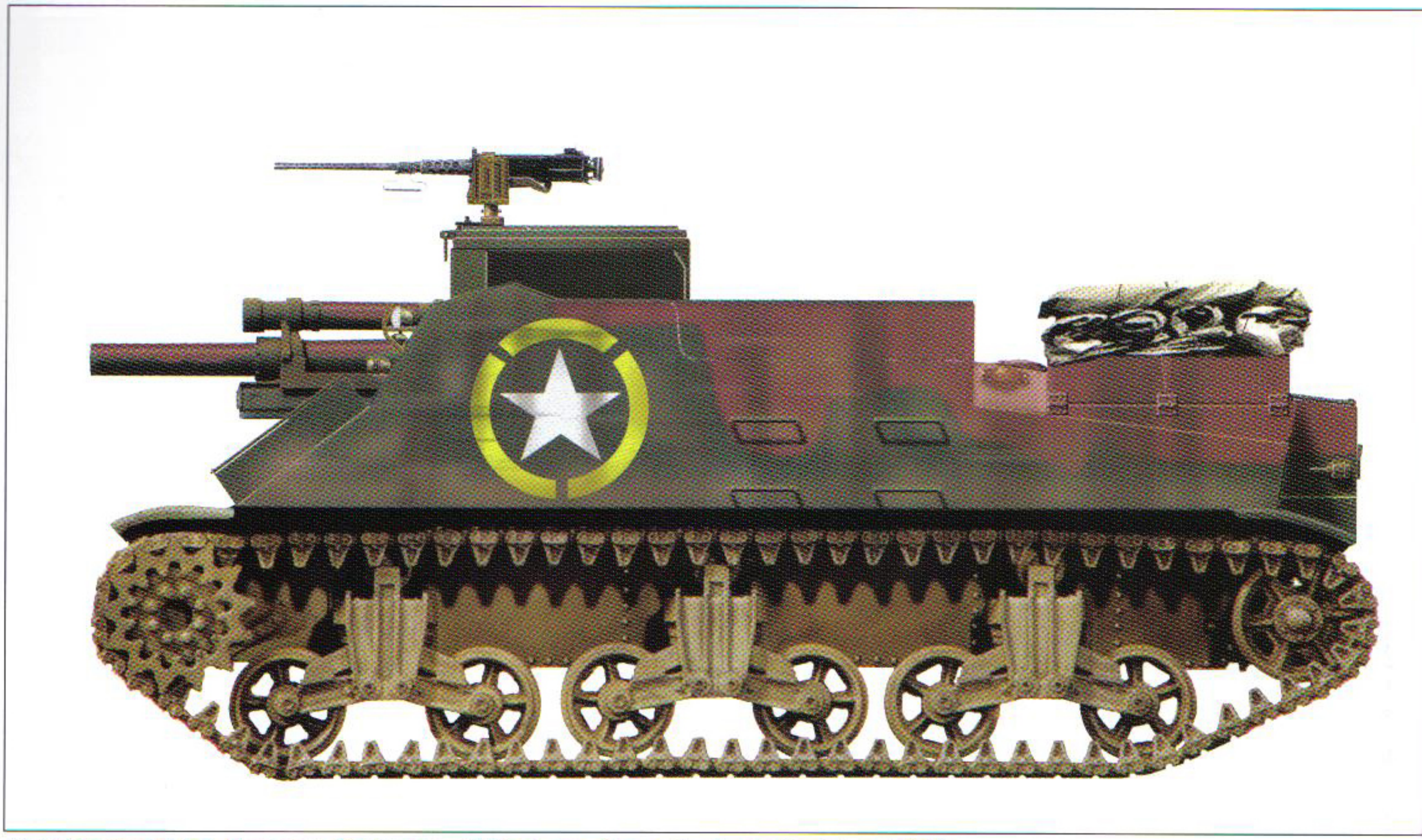
M7 105mm HMC, Cannon Company, 34th Division, Rabat, Morocco, July 1943

During the fighting in Tunisia, US Army vehicles were finished in the usual lusterless olive drab. This did not blend well in the desert, and so many units created an improvised camouflage paint using local mud. For parades like this one in Morocco after the fighting, the vehicles were painted in schemes based on engineer camouflage pamphlets. In this case, a pattern of No. 3 Sand has been painted over the usual olive drab.



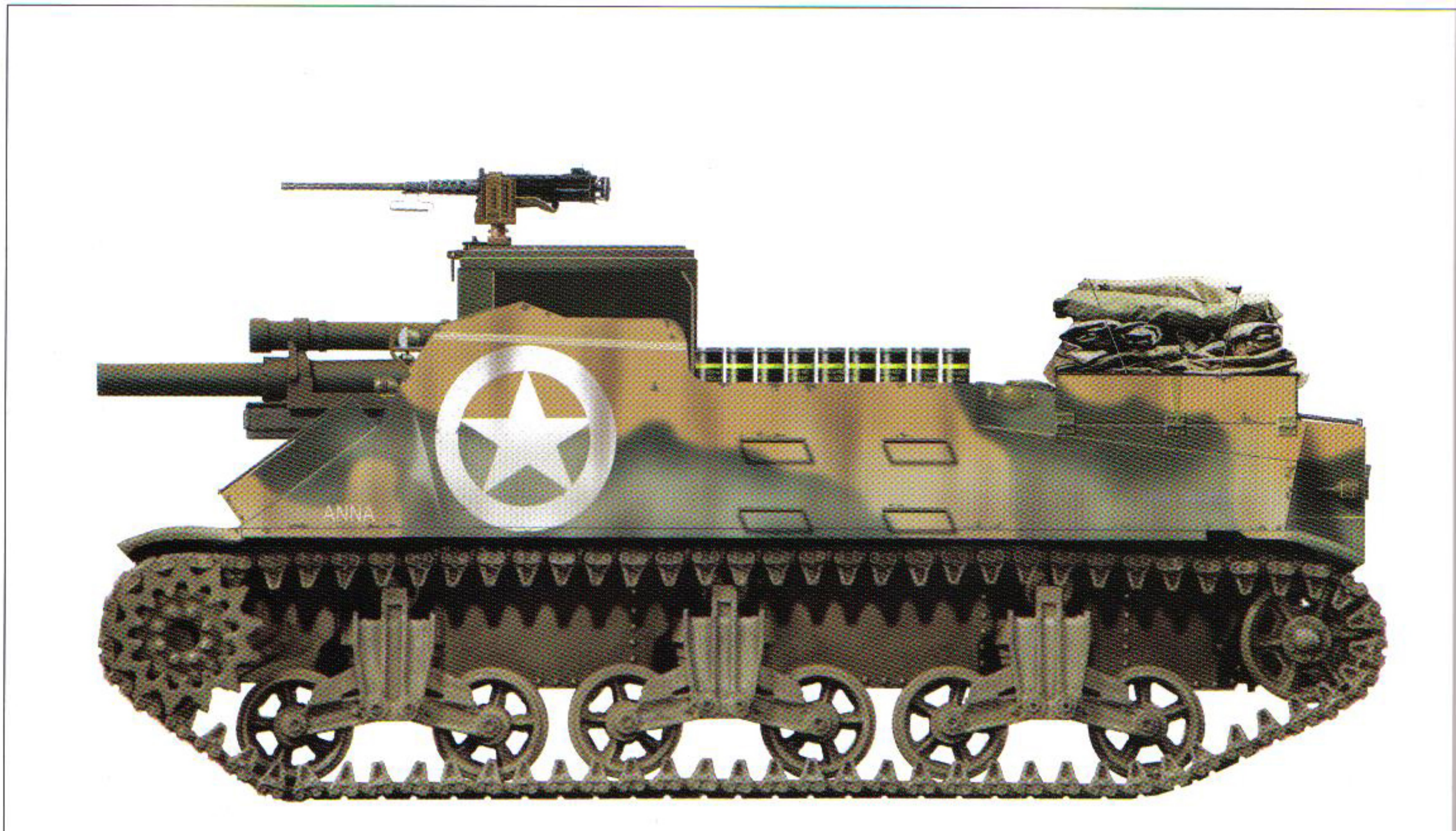
M7 105mm HMC, Field Artillery Battalion, 2nd Armored Division, Sicily, July 1943

In the wake of the North African fighting, there were complaints about camouflage discipline, leading to Operational Memo 34 providing guidelines for camouflage painting armored vehicles for Operation Husky, the landings in Sicily. Most armored vehicles of the 2nd Armored Division were painted with a pattern of the recommended No. 6 Earth Yellow over the usual olive drab. There were also complaints that the white US star could be mistaken for a cross at long ranges, so prior to Sicily, a spring ops memo instructed units to paint a white circle around the star, and in July units were ordered to double the thickness, leading to grotesque proportions as seen here. The number inset in the circle is the unit's quartermaster shipping code.



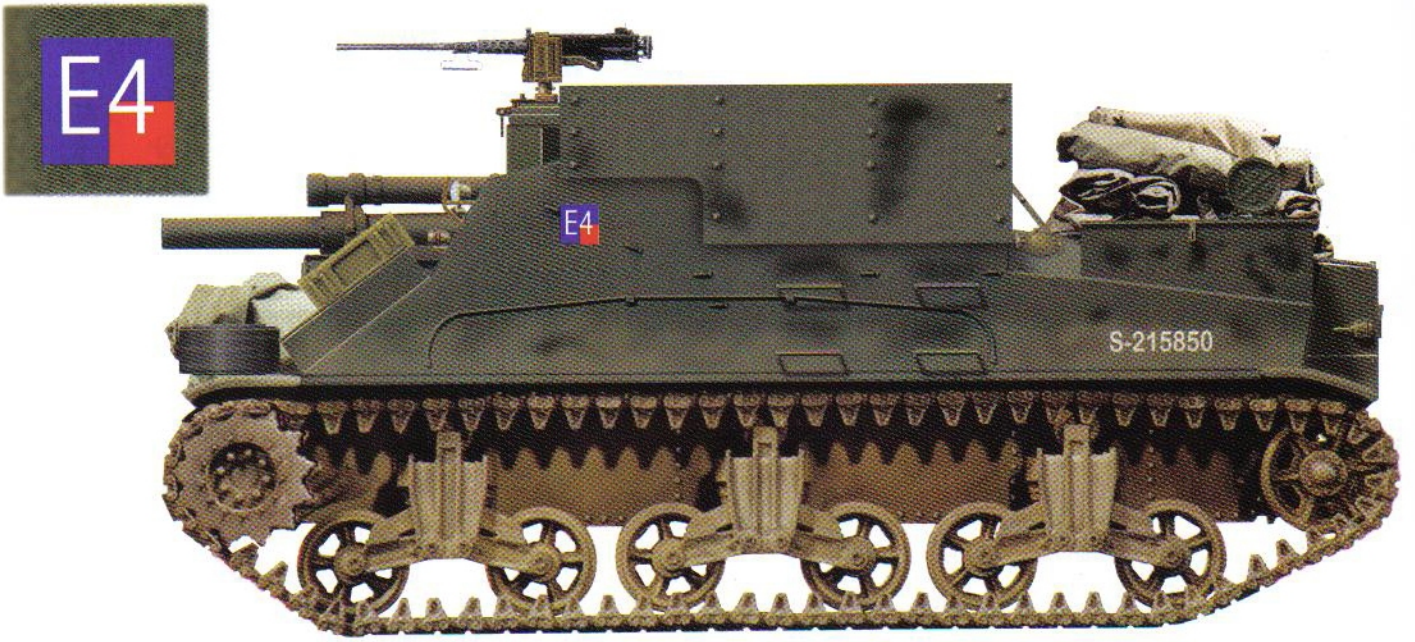
M7 105mm HMC, Cannon Company, Fifth Army, Caserta, Italy, October 1943

The operational memos for Operation Husky had called for the circle around the star to be painted in yellow, or in the event that paint was not available, in white. By the time of the Salerno landings, more units had managed to find yellow paint for the circle. Some units began painting the camouflage in No. 8 Earth Red over olive drab instead of the conspicuous earth yellow during the rainy autumn weather.



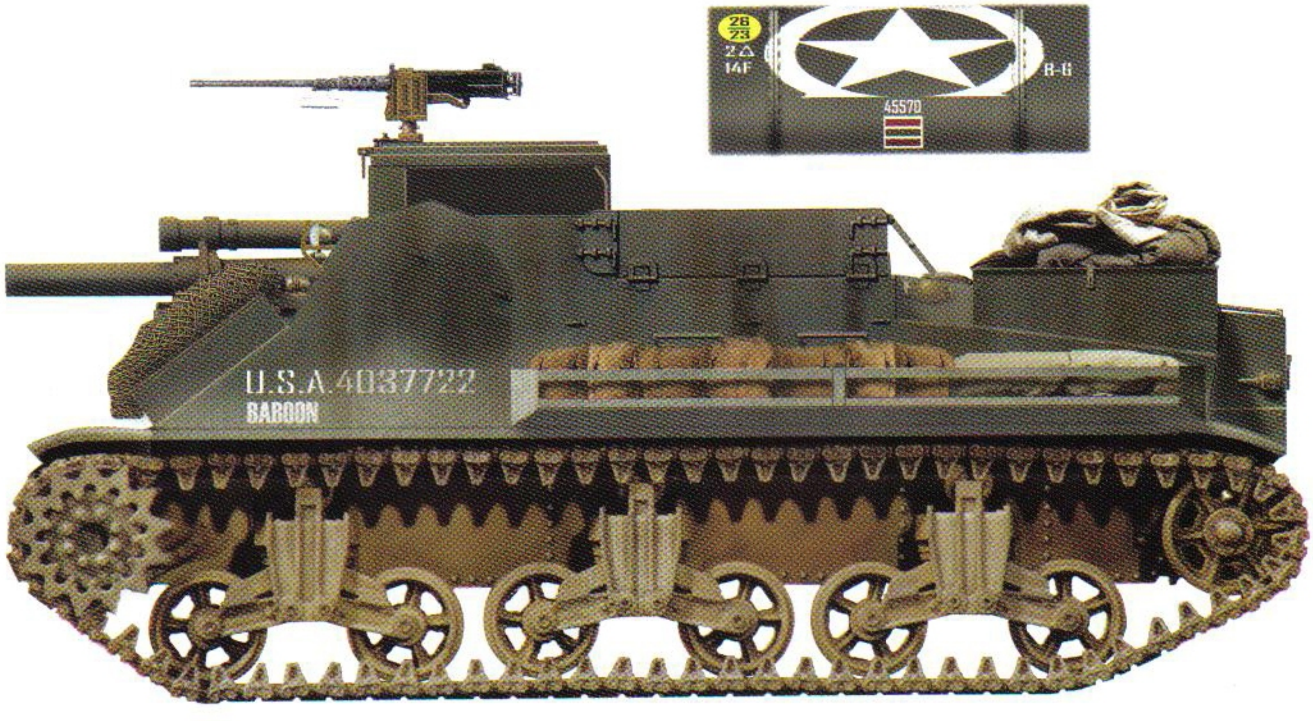
M7 105mm HMC, 68th Armored Field Artillery Battalion, Nettuno, Anzio beach-head, February 1944

By the time of the Anzio landings, the US star had settled into what would become its most common variation, a narrow white circle around the star, often broken due to the use of stencils to apply it. The yellow circled star was dropped if for no other reason than the lack of suitable paint. The camouflage paint has reverted back to earth yellow, although other units continued to use earth red or black.



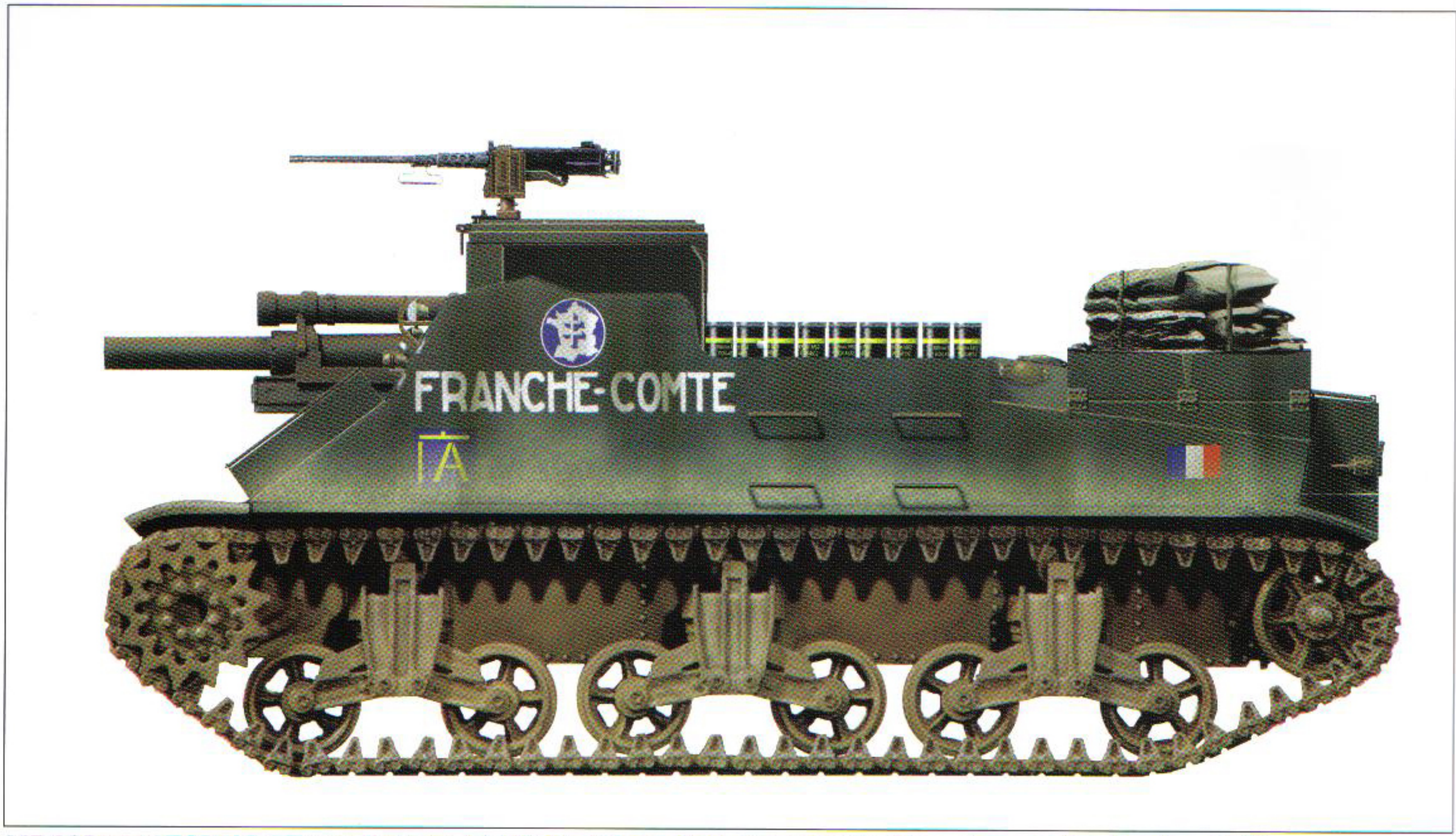
Priest 105mm SP, E Troop, 13th Field Regiment, RCA, Normandy, France, 1944

The Canadian army in France followed British practices in markings and camouflage. This Priest is finished in the usual Shade No. 15 Olive Drab which was essentially similar to US olive drab and adopted in the spring of 1944 to avoid the necessity of repainting Lend-Lease equipment. The Royal Canadian Artillery (RCA) used the British marking system, and the insignia shown in the inset is for the 4th Gun of Easy Troop. The usual divisional insignia and arms of service marking are not evident on photos of vehicle, presumably as they are submerged under gear.



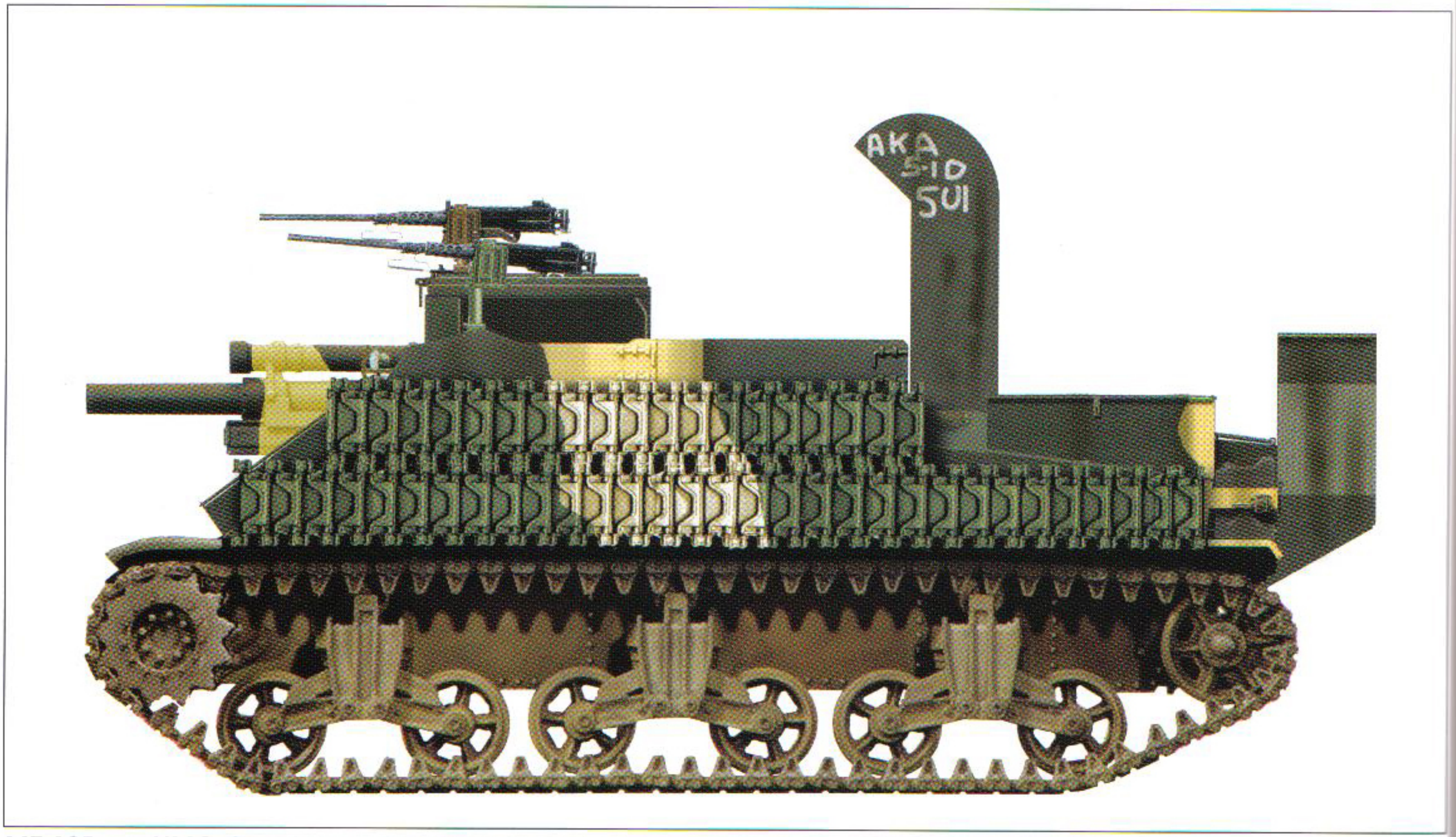
M7 105mm HMC, Battery B, 14th AFAB, 2nd Armored Division, Normandy, France, 1944

Most M7 105mm HMC of the 2nd Armored Division were reconfigured prior to Normandy with these distinctive mine rack/stowage racks along the hull side, patterned after those on half-tracks. They seldom carried mines after trials in England revealed their vulnerability to small arms fire. The markings include name, starting in B for Battery B and the usual registration number in white. On the front transmission cover is the usual circled Allied star, adopted as a common Allied marking in Ops Memo 20 in the spring of 1944 prior to D-Day. The yellow circle is the bridging marking with the two weights indicating weight with and without trailer. The vehicle bumper codes are evident on either side. The marking below the star is the quartermaster shipping marking, intended to assist in keeping equipment together during transit. The colors of the bar are based on the final two numbers of the code, and in this case are maroon/brown/maroon.



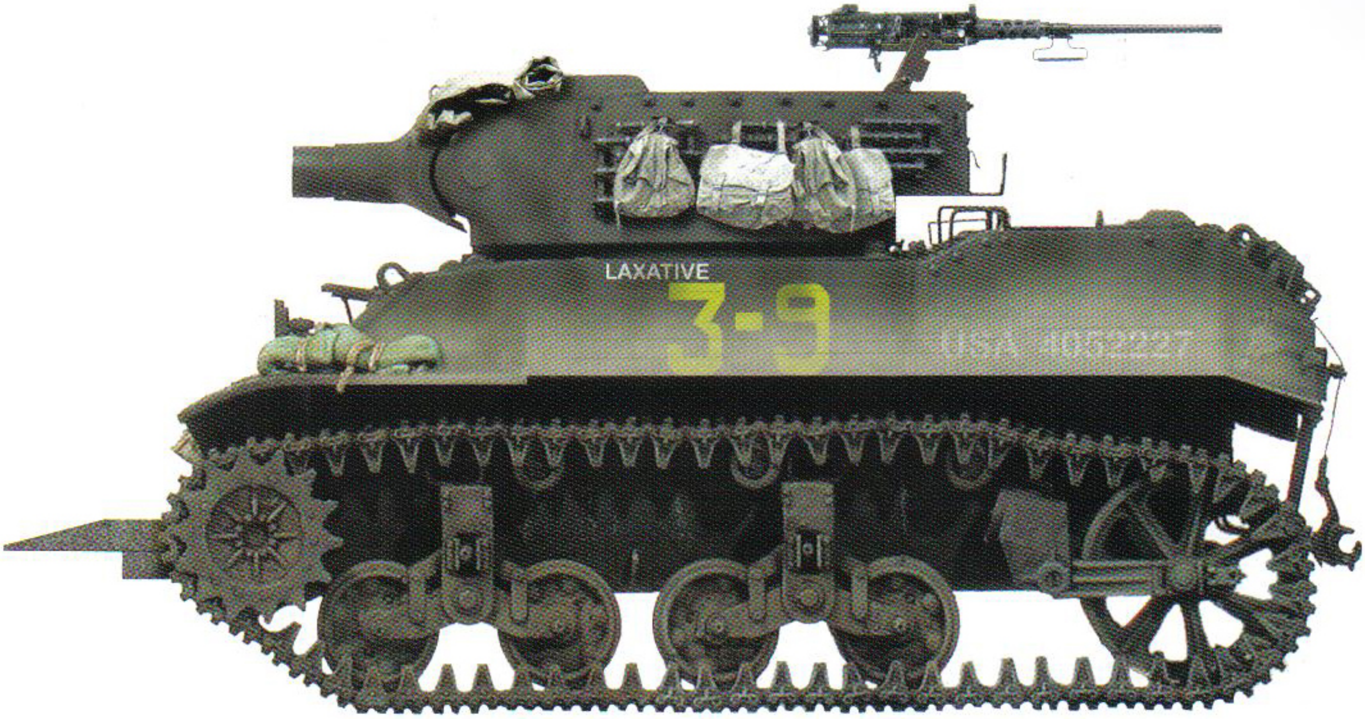
M7 105mm HMC, 31st Firing Battery, 64 RADB, French 2nd Armored Division, France, September 1944

French armored vehicles had their own markings practices, with one style applied to Leclerc’s 2nd Armored Division which usually fought as part of a US corps, and another style on all other units, which were part of the First French Army of the US 6th Army Group. The 2nd Armored Division adopted the blue cross of Lorraine on a map of France as a tribute to Charles DeGaulle. French AFVs used a common tactical insignia consisting of a square in the division’s color, with the branch of service indicated as a letter (here A for artillery) and a set of bars indicating the unit and sub-unit. Nearly all vehicles received a name, usually painted prominently in white.



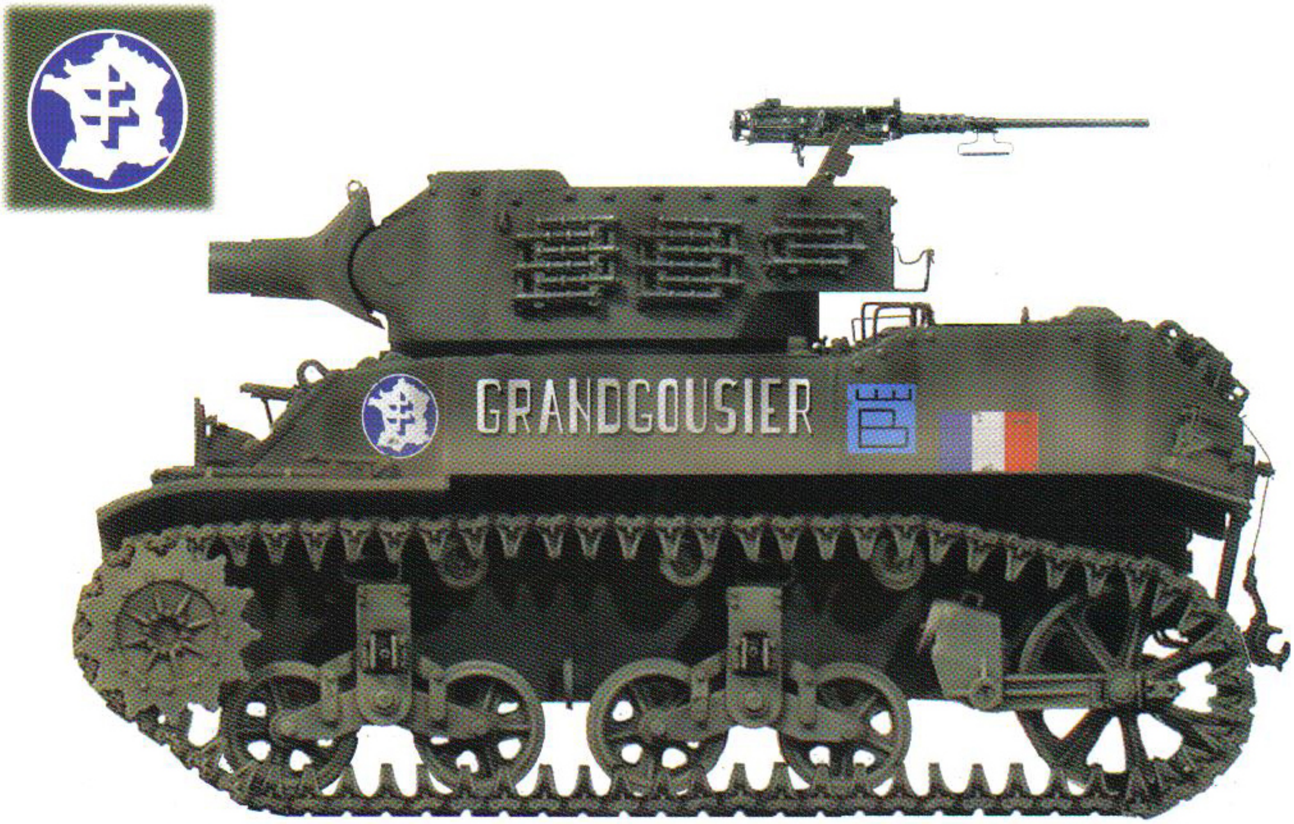
M7 105mm HMC, Special Weapons Company, 1st Marine Division, Okinawa, July 1945

US Marine armored vehicles were finished in the same olive drab color as army vehicles, though camouflage painting was somewhat more common. In this case, a pattern of sand color has been applied over the olive drab. The central wading trunk has chalked on instructions for the assault transport ship carrying the battery.



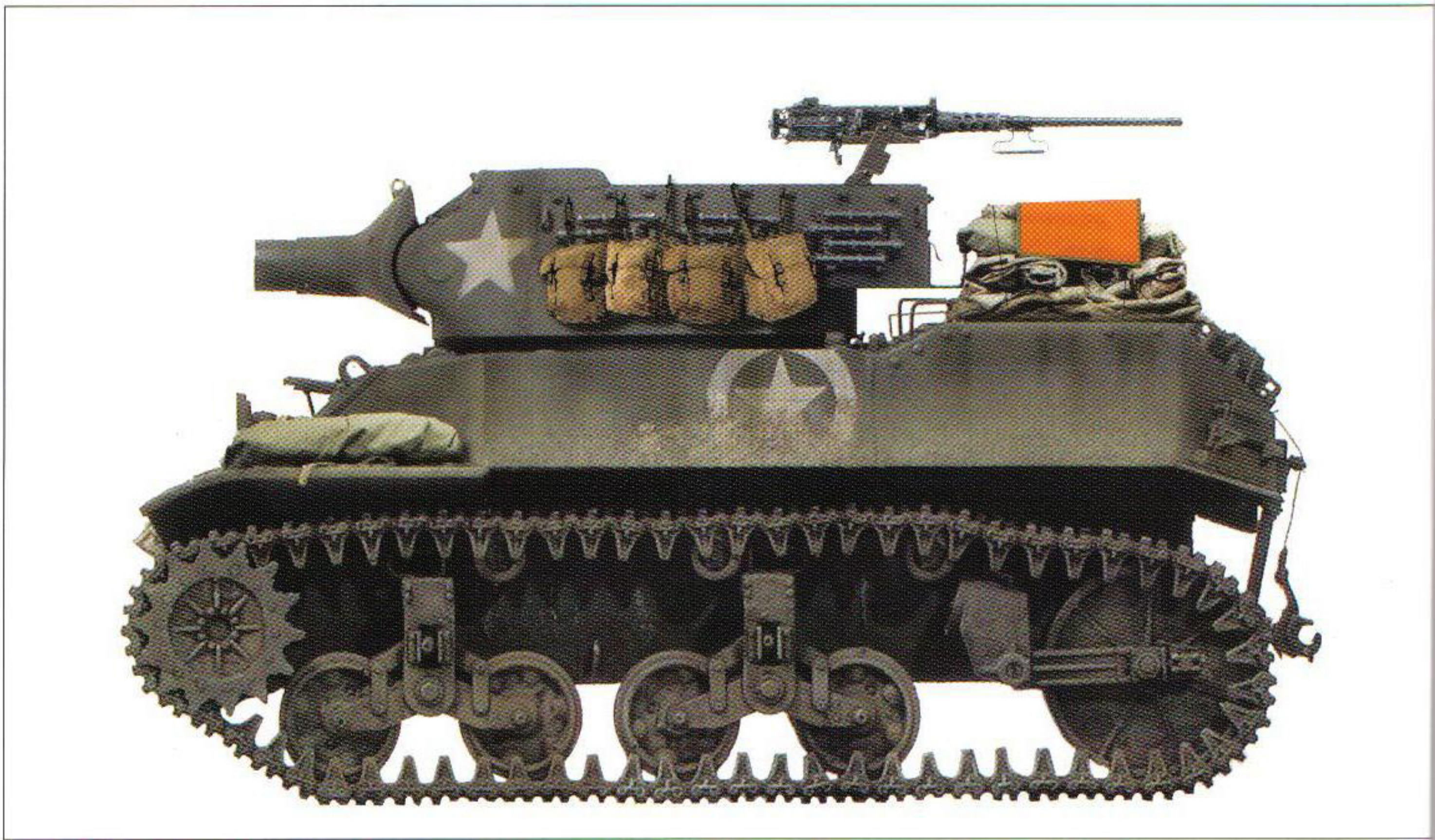
M8 75mm HMC, 82nd Armored Reconnaissance Battalion, 2nd Armored Division, Barenton, France, August 1944

The 2nd Armored Division, like the neighboring 3rd Armored Division, adopted the practice of painting the vehicle tactical number on the hull side of light tanks and other smaller vehicles, and on the turrets of tanks in yellow. This practice began to be abandoned around the time of Operation Cobra in late July 1944 when many unit vehicles were painted with the new First Army camouflage pattern of black over olive drab. This particular vehicle appears to have escaped the paint-gun and is in overall olive drab.



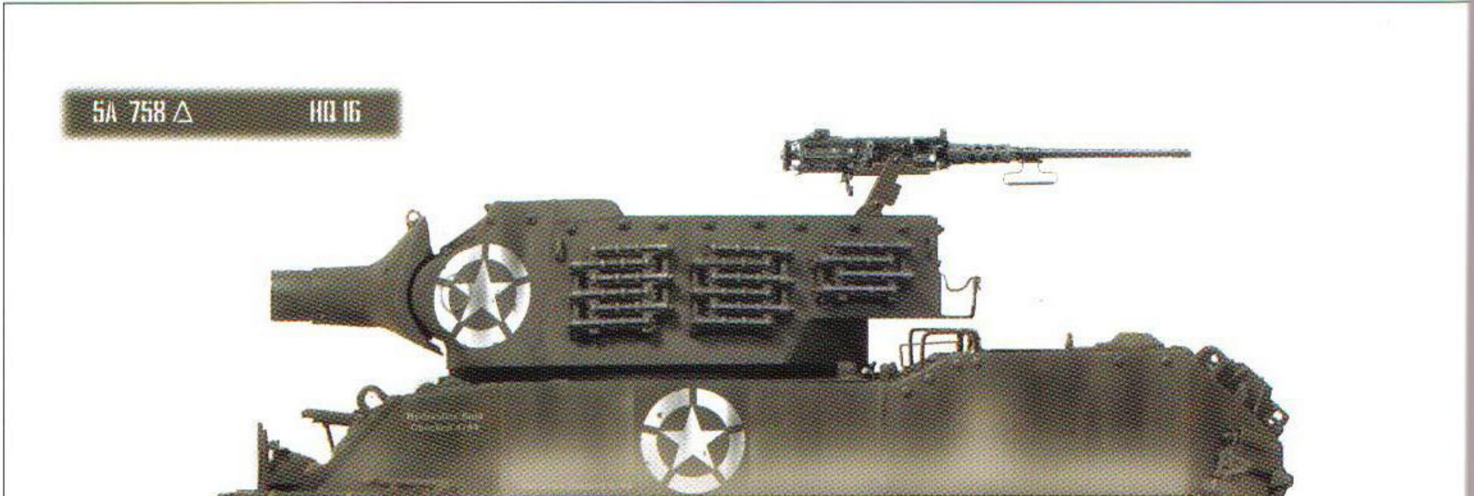
M8 75mm HMC, 2nd Group, 1st Support Company, Regiment de Marche du Tchad, 2nd French Armored Division

The M8 was used on French support companies much like US army cannon companies. The markings are typical of the French 2nd Armored Division although the colors of the tactical insignia are not standard. Some French M8 HMCs carried the white circled Allied star, but most did not.



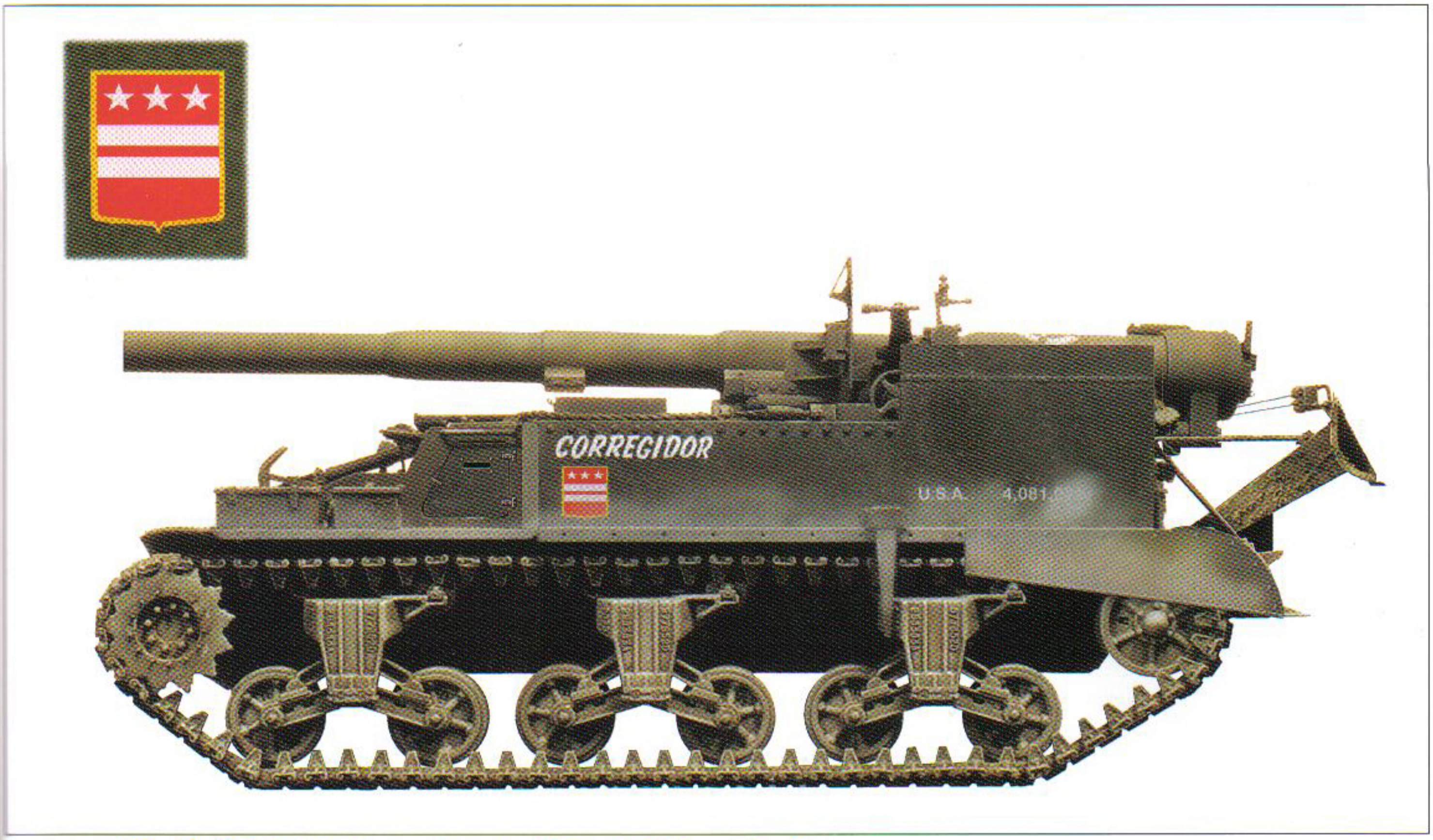
M8 75mm HMC, Troop E, 106th Cavalry Reconnaissance Group, Germany, February 1945

This is a fairly typical example of a cavalry assault gun late in the war, with the markings limited to some Allied stars and any other markings painted over or covered with mud and gear. The US First Army continued to maintain a practice of camouflage painting their AFVs in black ove olive drab, but this was often ignored due to lack of time and paint.



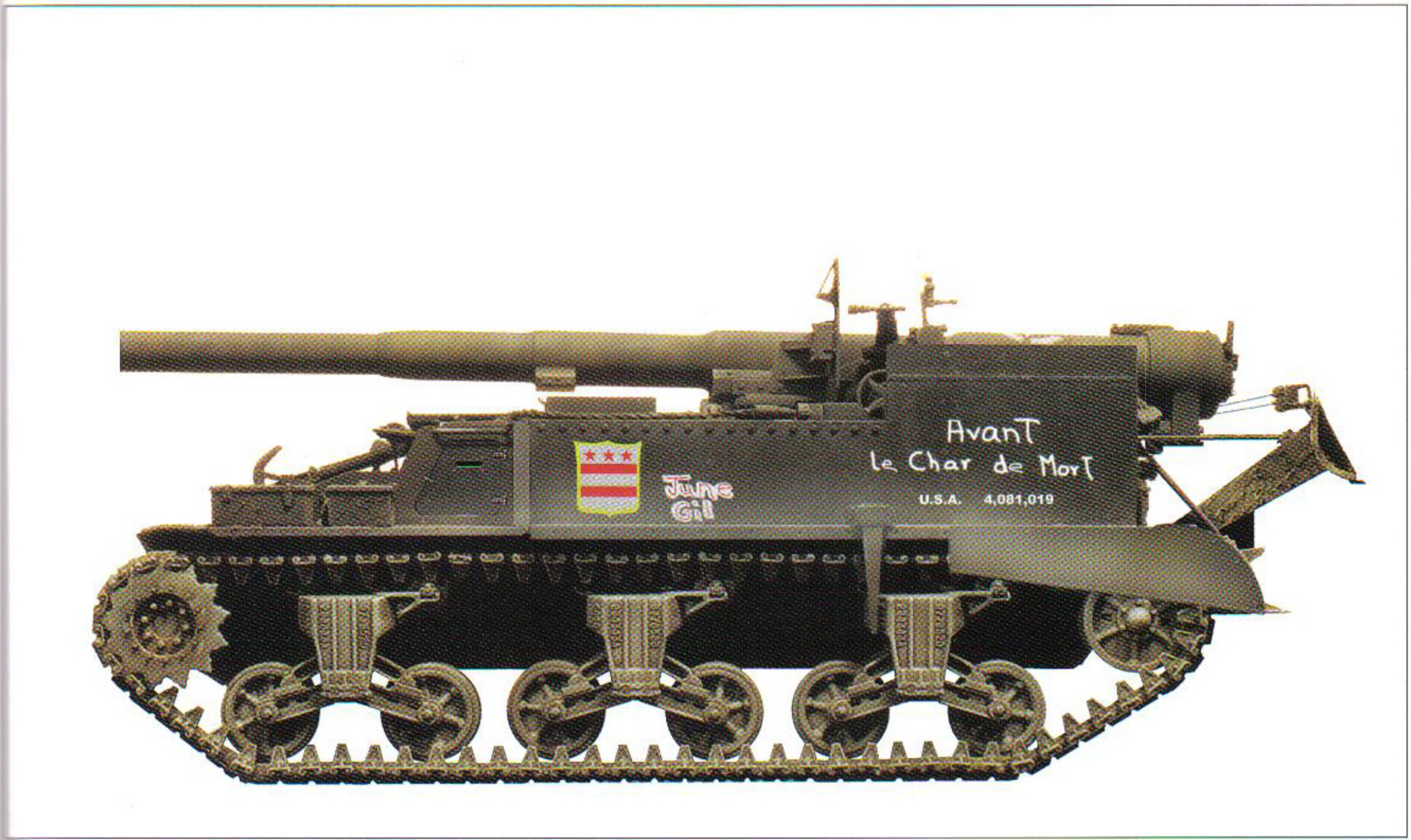
M8 75mm HMC, Assault Gun Platoon, 758th Light Tank Battalion (Cld.), Italy, April 1945

By the end of the war in Italy, most US armored units used the standard star within a circle as the national insignia. The bumper codes fo this unit begin with 5A (Fifth Army) since the unit is a separate tank battalion under general HQ command, and not permanently attached t a division. The assault gun platoon was attached to the headquarters company, and so bore the "HQ" code.



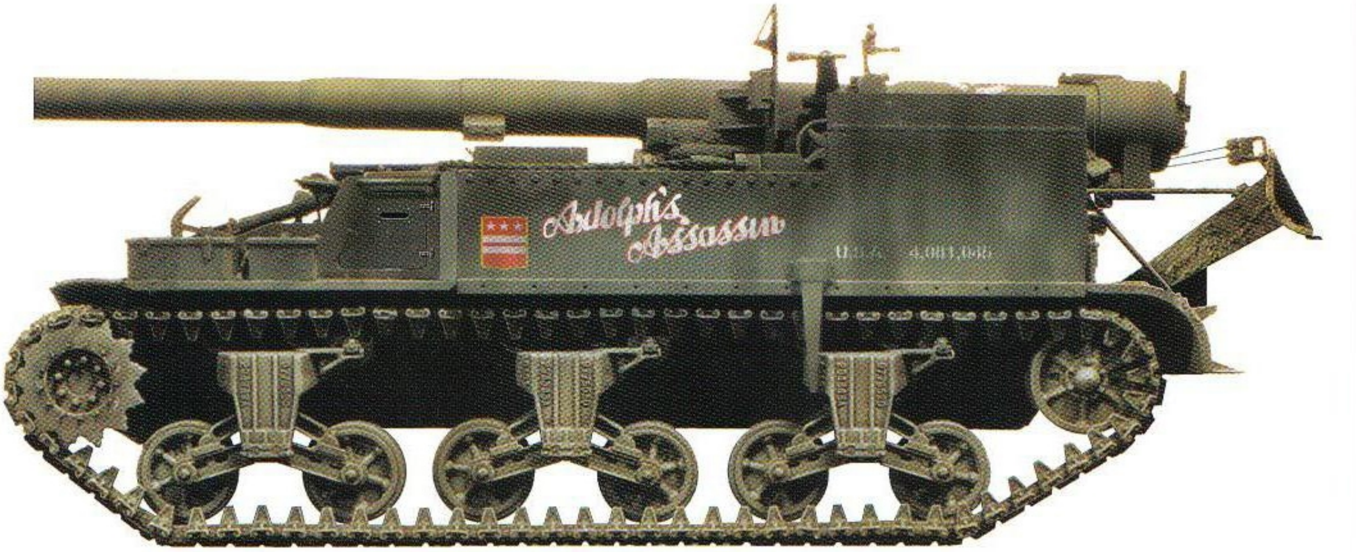
M12 155mm GMC, 991st Field Artillery Battalion, France, June 1944

The 991st Field Artillery Battalion, being one of two artillery battalions in the US Army to have descended from the legendary Washington Grey's, kept a unit crest based on their parent regiment with two gray bars on a red shield. This marking was common on the unit's vehicles through the French campaign.



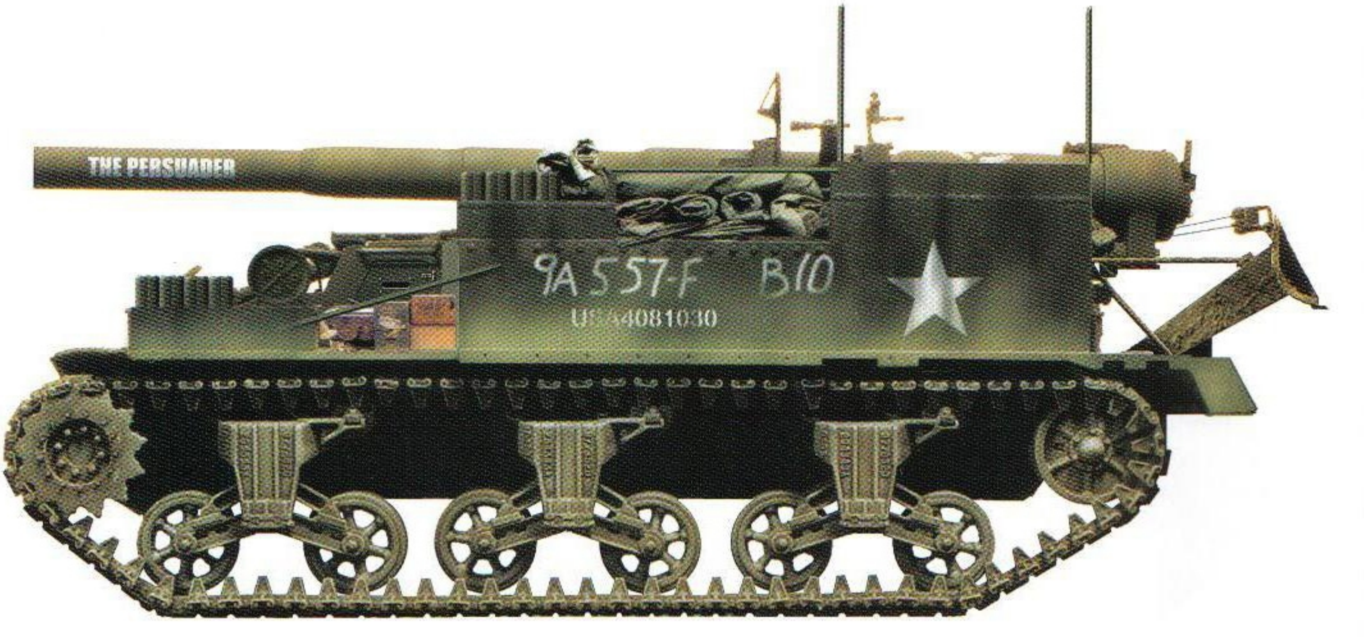
M12 155mm GMC, 991st Field Artillery Battalion, France, July 1944

This M12 has a battalion crest with the colors in the reverse order. It is not clear if this was a method of marking one of the firing batteries, or simply a mistake. The slogan chalked in French on the rear, courtesy of local French civilians, means "Forward Tank of Death".



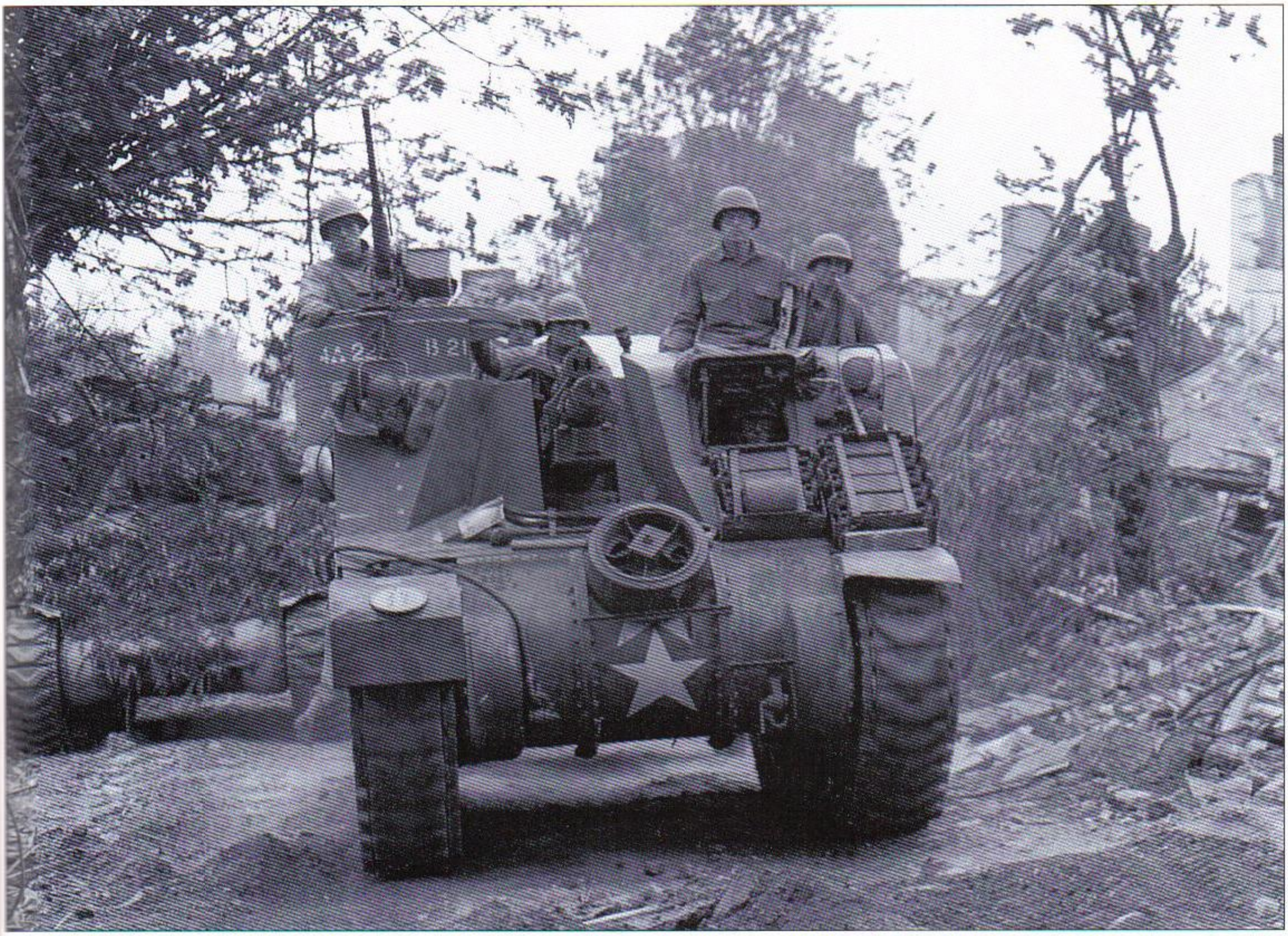
M12 155mm GMC, 991st Field Artillery Battalion, Belgium, September 1944

This is an example of one of the more elaborate vehicle names painted on the sides of a M12 of the 991st Field Artillery Battalion, certainl the most colorful of the six battalions equipped with this vehicle. By later in the fall, this unit began over-painting the unit crest with olive drab presumably for security reasons.



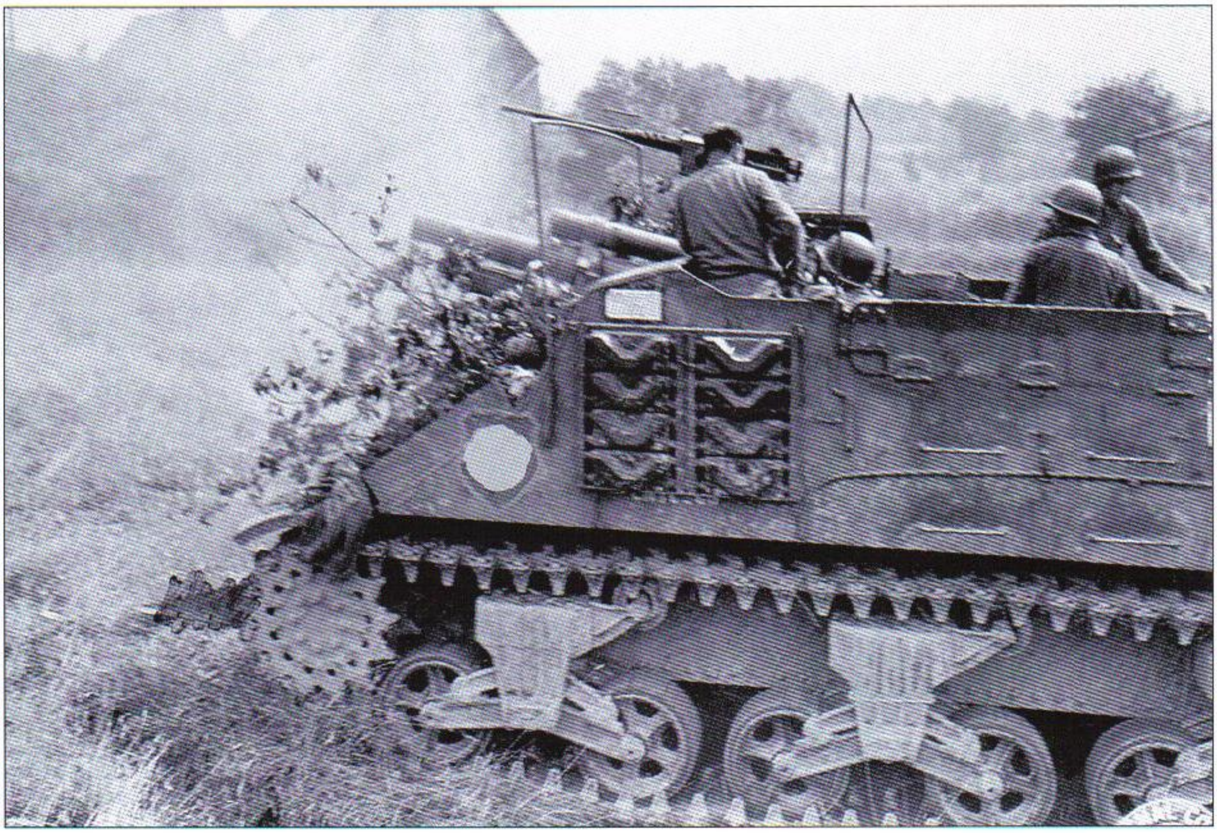
M12 155mm GMC, 557th Field Artillery Battalion, Operation Grenade, Germany, February 1945

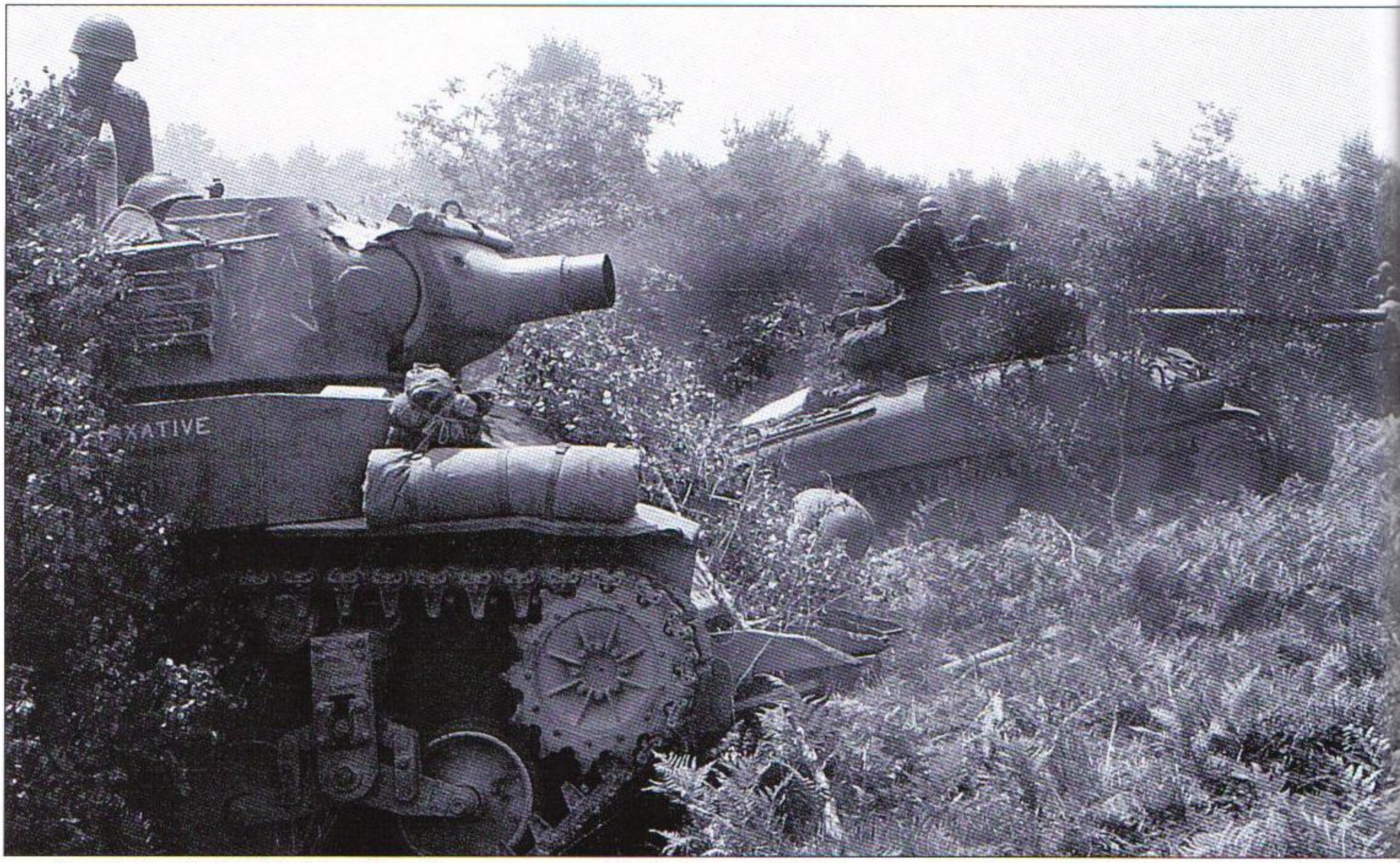
The field artillery battalions tended to have very simple markings, often limited to national insignia and registration numbers. In this case, the vehicle name has been painted on the barrel, and the vehicle unit ID has been chalked on the side to make it easier for military police to direc traffic during the Roer river crossing during the opening phase of Operation Grenade.



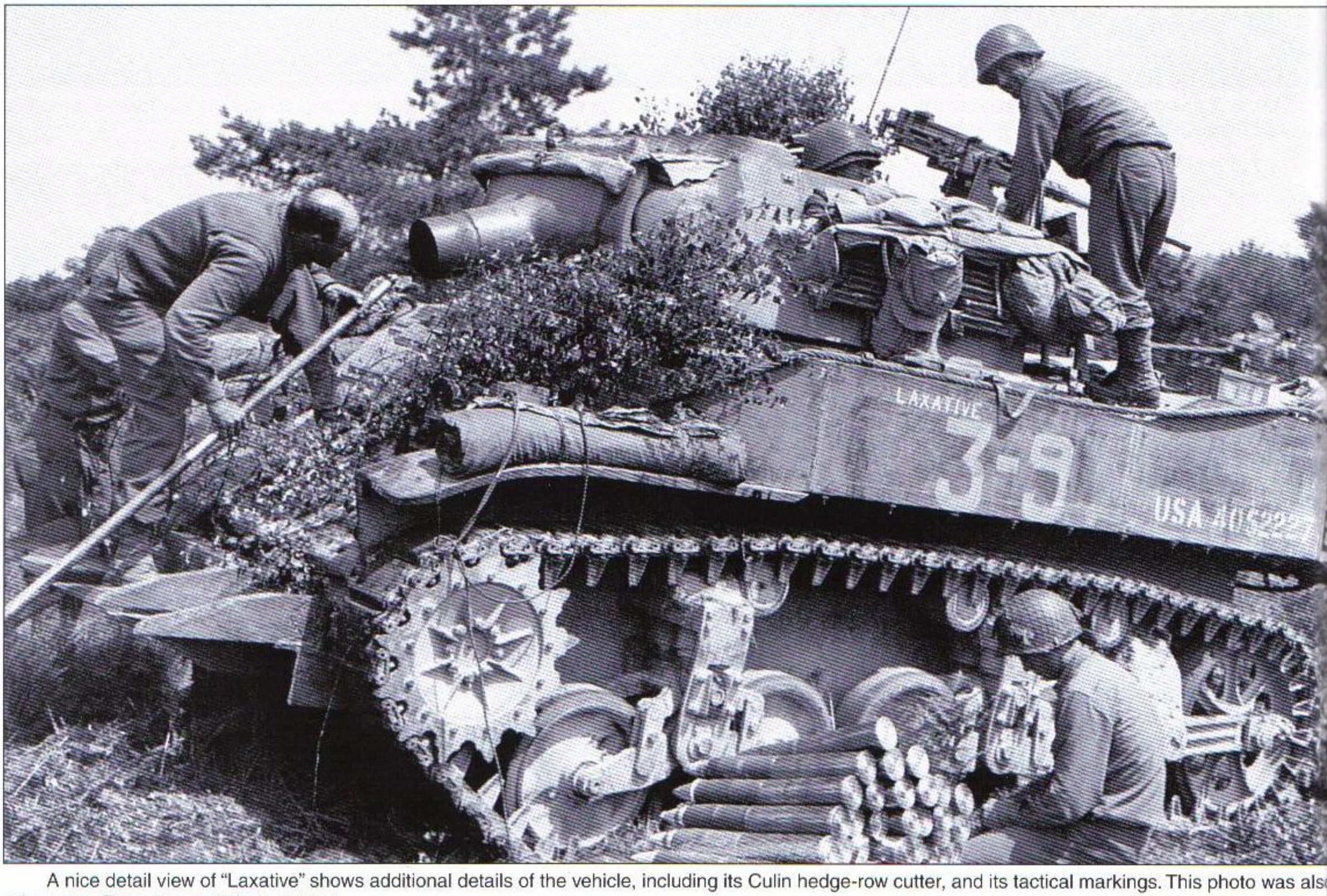
A M7 105mm HMC of Battery B, 22nd AFAB, 4th Armored Division passes through the ruins of Coutances on 31 July 1944 on its way to Brittany during Operation Cobra. It is an intermediate production vehicle with the three piece transmission cover.

A M7 105mm HMC is seen with its howitzer tube in full recoil during the fighting near St. Pois on 3 August 1944. The censor has obliterated the unit crest on the forward side of the vehicle. This is an 1943 production vehicle with the newer D47527 heavy duty vertical volute suspension and the added armor flaps to cover the ammunition on the side. The censor has also obliterated the Culin hedge-row cutter fitted to the front of the vehicle.



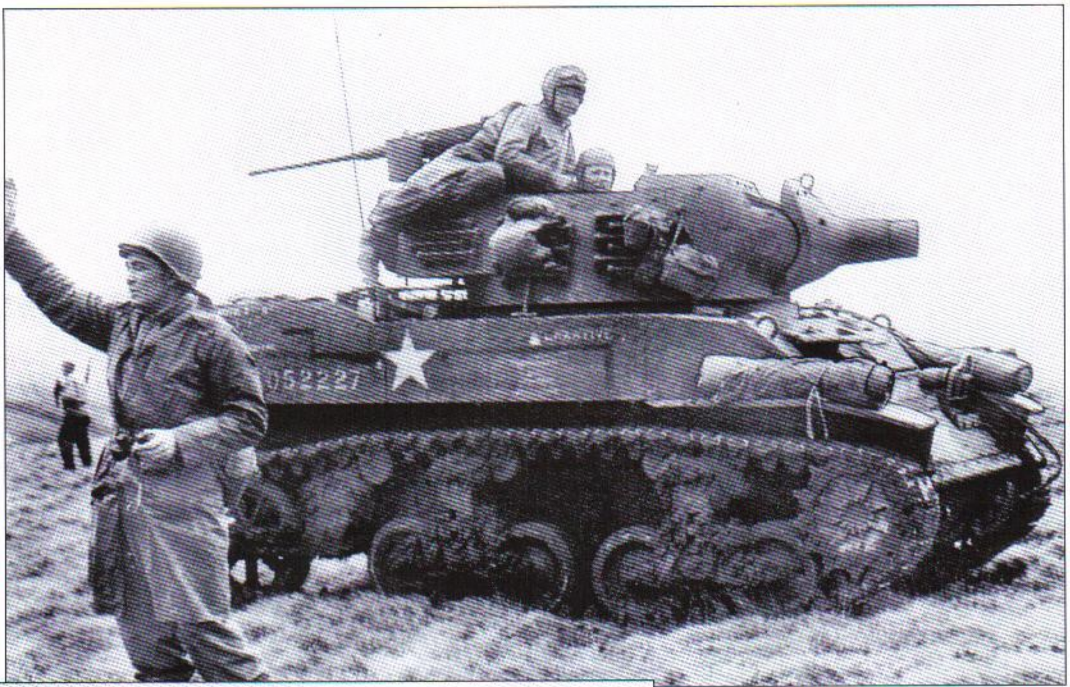


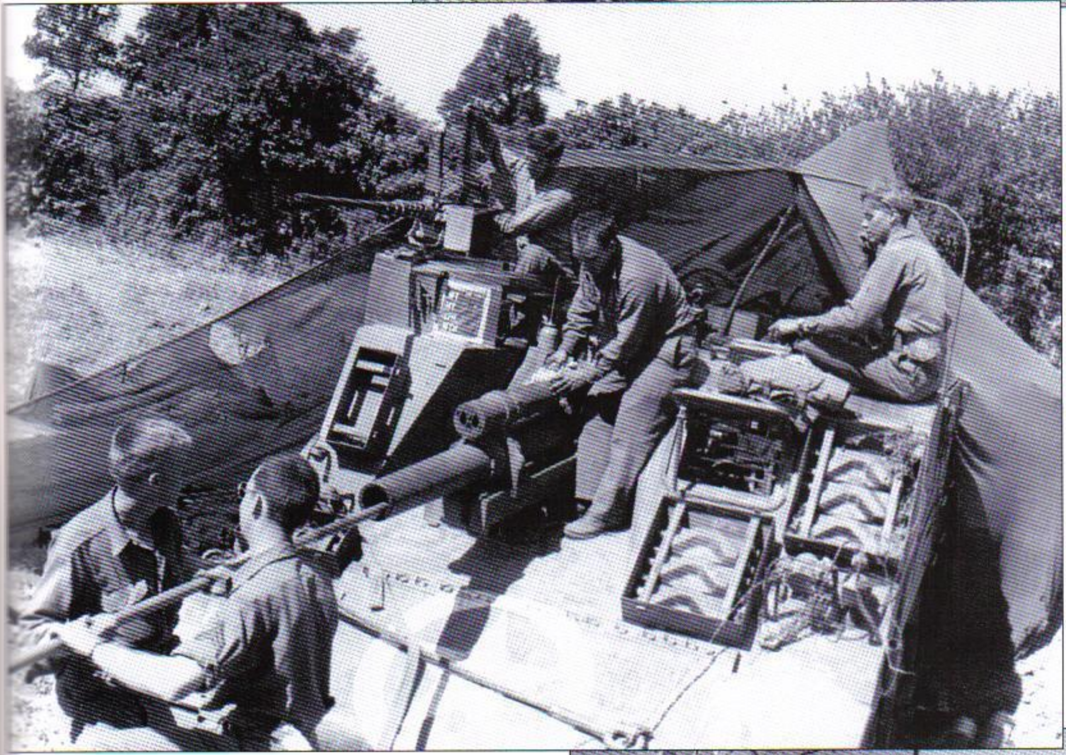
"Laxative" a M8 75mm HMC of a reconnaissance company of the 2nd Armored Division, moves forward near a M4A1 (76mm) during the fighting nea Barenton on 9 August 1944.



A nice detail view of "Laxative" shows additional details of the vehicle, including its Culin hedge-row cutter, and its tactical markings. This photo was als taken near Barenton on 9 August 1944.

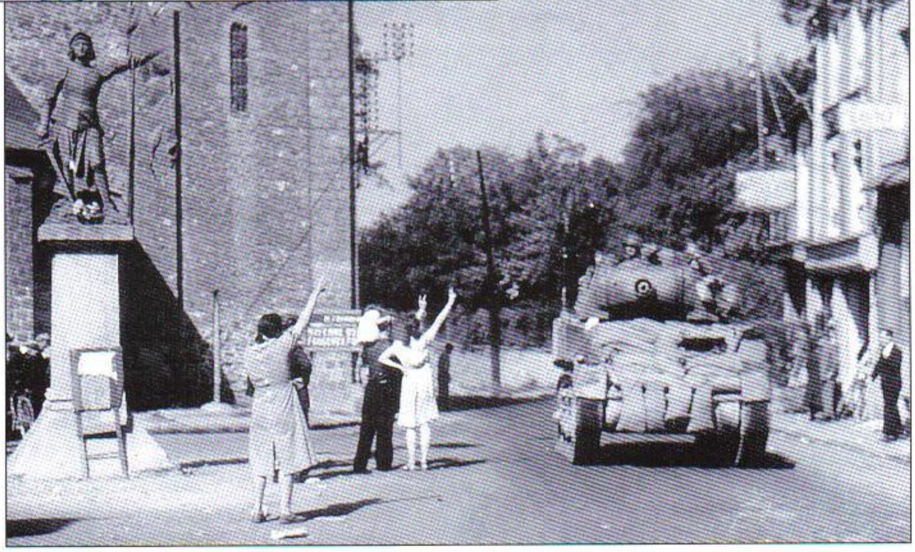
Another view of the often-photographed M8 75mm HMC nicknamed "Laxative" is seen at a later stage of the war with some changes in its markings such as the deletion of the prominent tactical numbers.

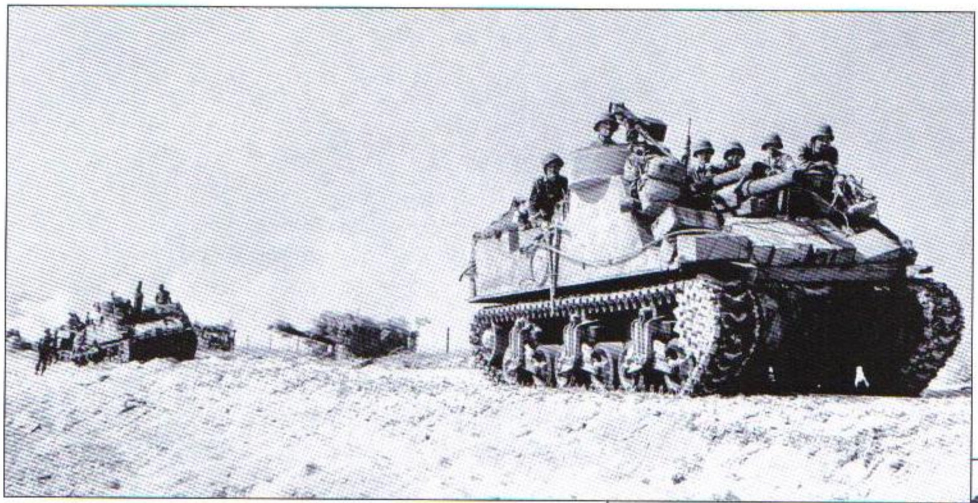




The crew of a M7 105mm HMC of the 83rd AFAB, 6th Armored Division swab out their barrel during the fighting for Brest on the Breton peninsula on 13 August 1944. This is a 1944 late production vehicle with the E8546 transmission cover.

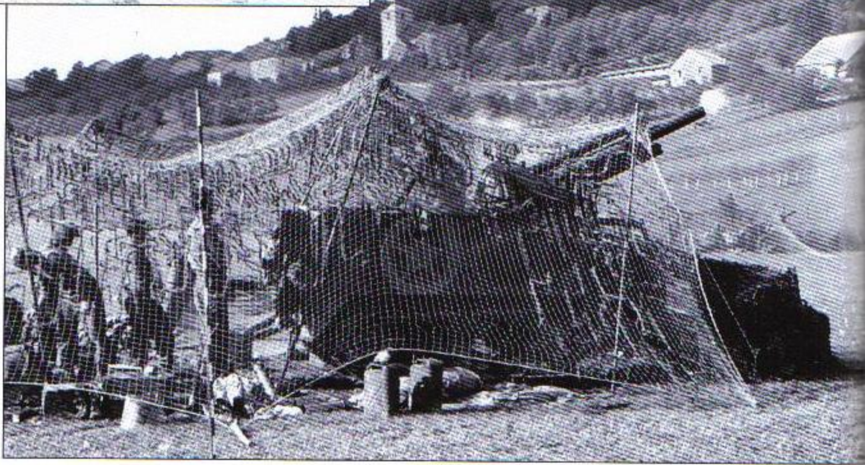
A M8 75mm HMC of the 3rd Armored Division is greeted by the townspeople of Javron as it passes by a statue of Joan of Arc near the town church. It is an early example of the practice of placing sand-bags on the glacis plate for additional protection.



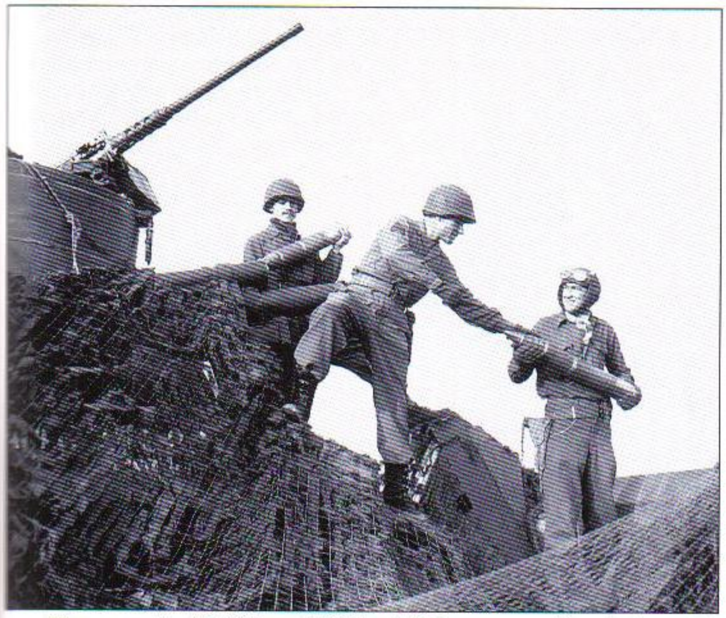


A M7 105mm HMC of Devers' Seventh Arm comes ashore in southern France as part Operation Dragoon. The units of this invasio force came out of Italy and so tended to hav older equipment than comparable units Bradley's First Army in northern France.

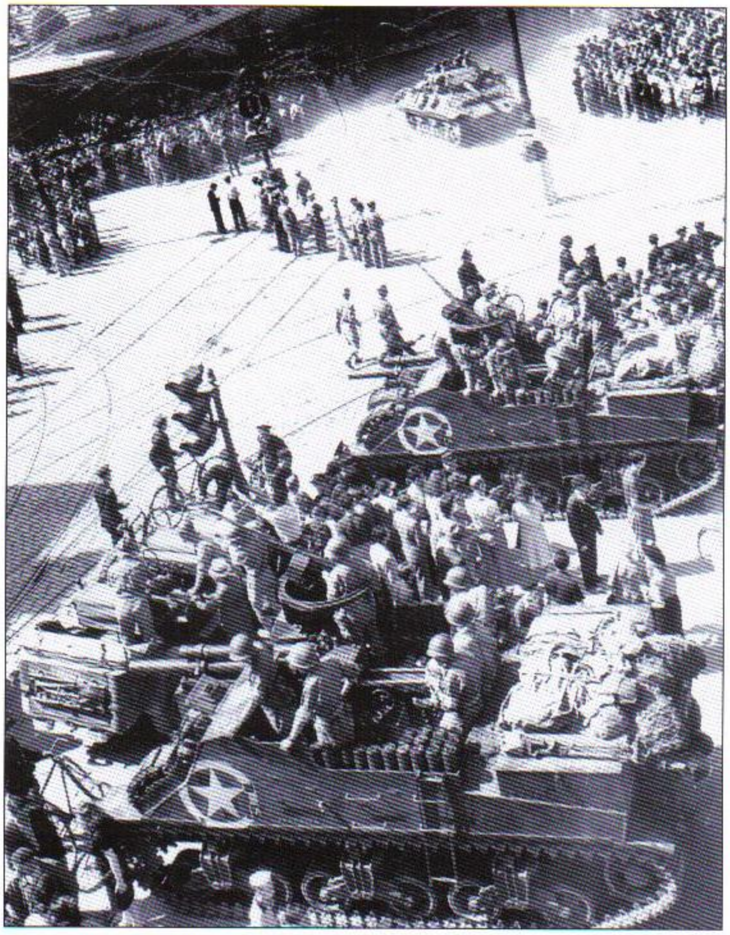
One of the last remaining T19 105mm HMC in US Army service is seen here in southern France providing fire support for the Seventh Army operations after Operation Dragoon in late August 1944. By this stage, units in Normandy had completely reequipped with the M7 105mm HMC, and the old T19 105mm HMC was only in service in the Italian theatre in dwindling numbers.



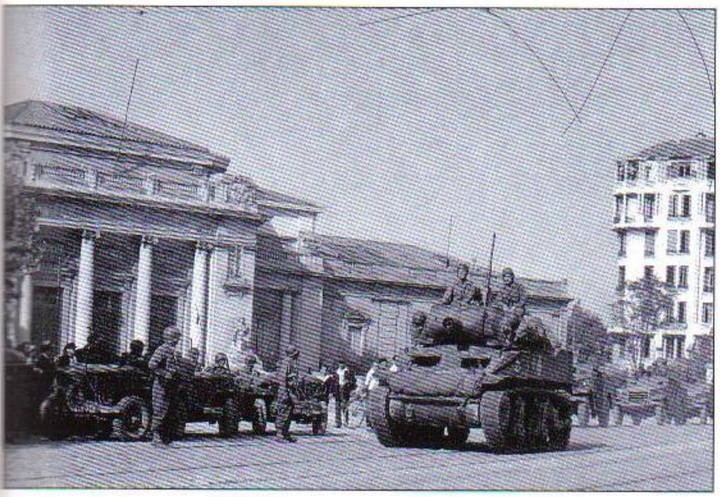
A M7 105mm HMC takes part in a fire mission on 20 August 1944 near Avet, France. This is a 1944 late production type with the factory sand-skirts, new suspension and other late features such as the basket on the rear sponson box.



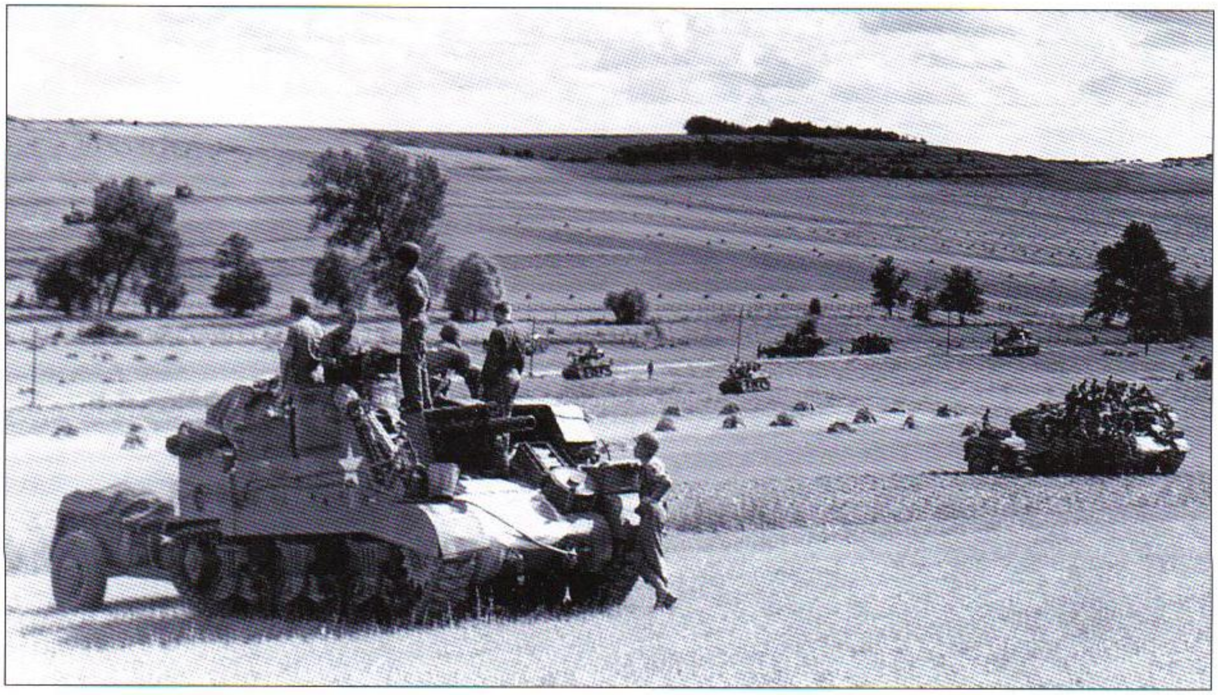
The crew of a M7 105mm HMC load 105mm ammunition during a lull in the fighting. The 105mm howitzer used a semi-fixed round with a conventional brass propellant casing which could be easily removed to change charge increments to adjust the range if necessary. The typical high explosive round weighed 42 pounds.



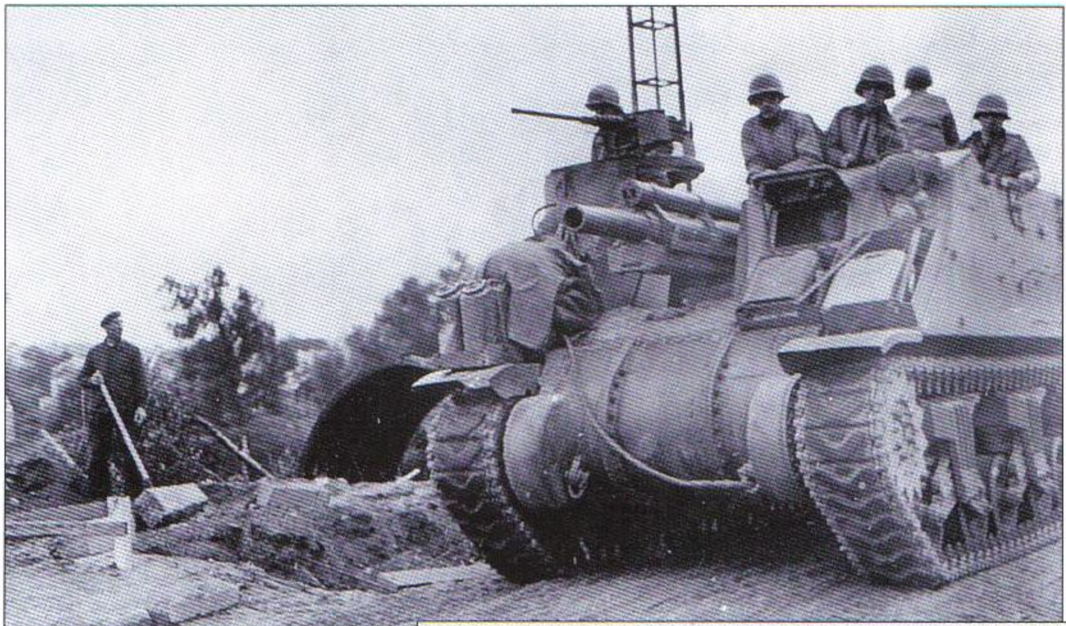
The French First Army celebrates liberation day on 29 August 1944 in Marseilles with a parade by the 3rd Algerian Division. This overhead view provides good detail of a pair of intermediate production M7 105mm HMC which are carrying a full load of ammunition in the usual black fiberboard tubes.



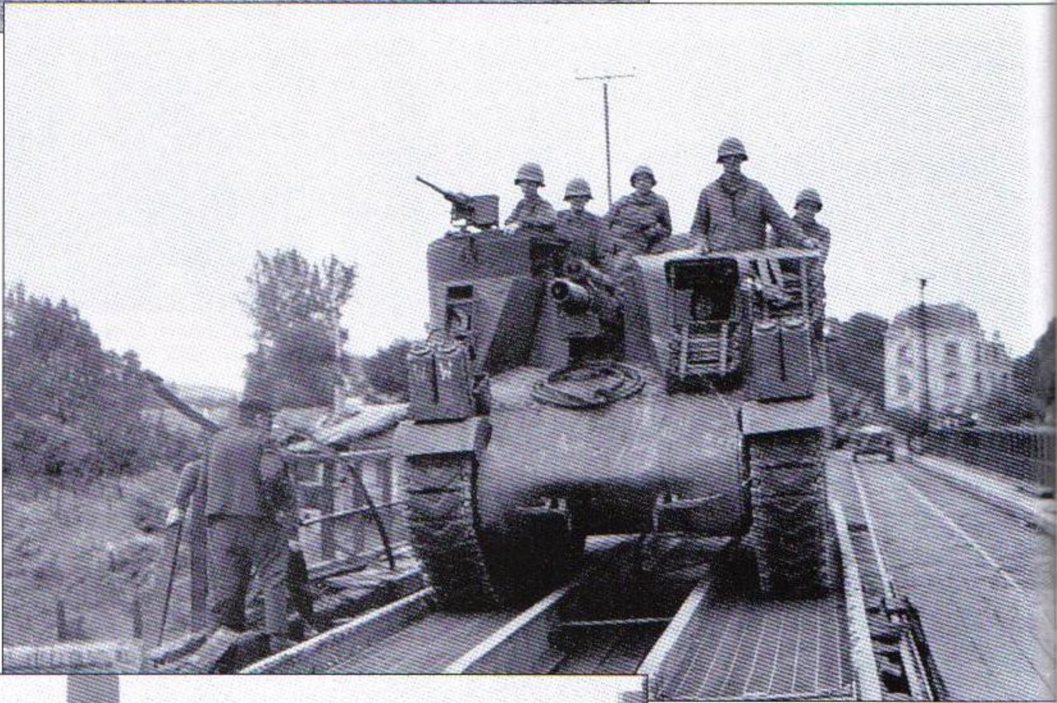
The First French Army took part in the landings in southern France in mid-August, and here a M8 75mm HMC of the 9 DMI is seen in front of the Palais de Justice in the port city of Toulon on 26 August 1944. Behind it are some M3A1 scout cars, a type which had been retired from US Army service but which was still widely used in the French units at the time.



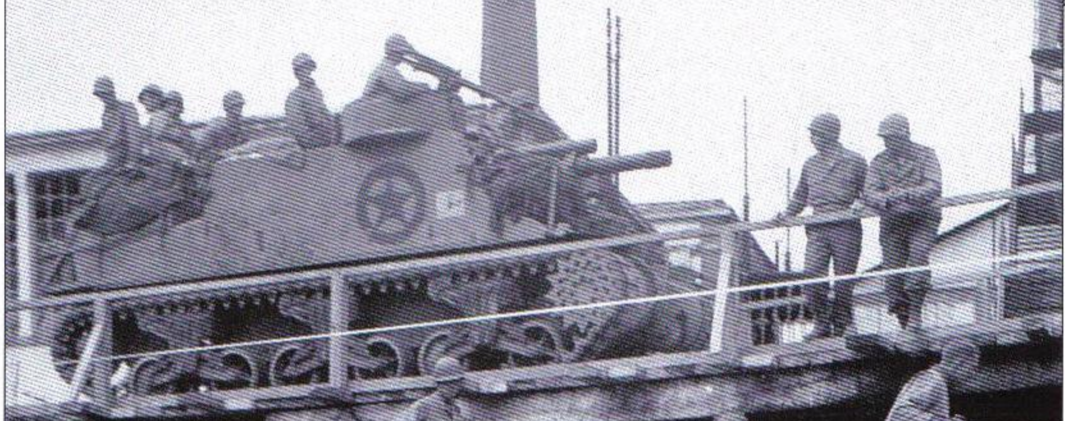
A group of M7 105mm HMC in the rolling countryside of northern France from a US armored division await further orders. The vehicle in the foreground has the late production features.



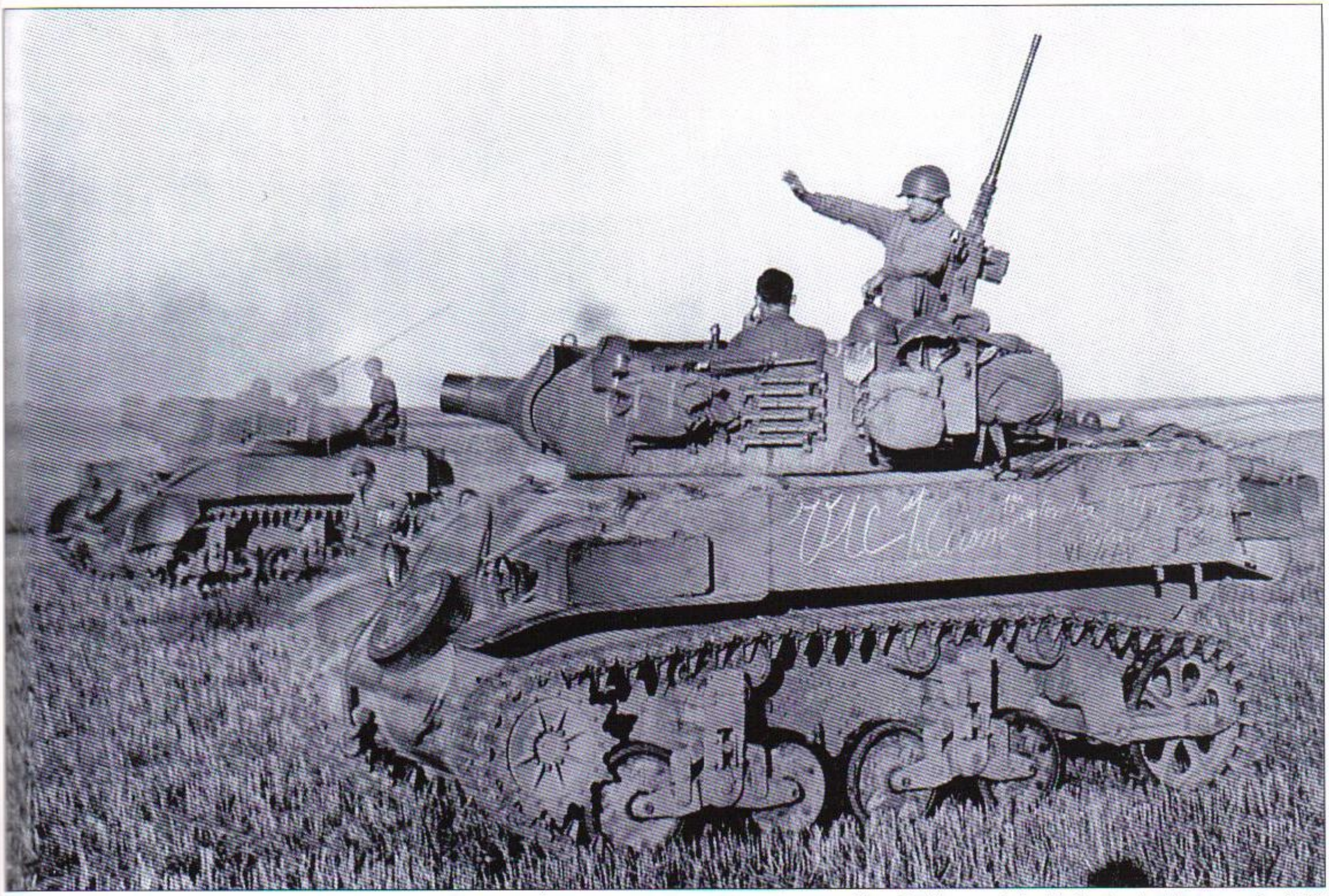
A M7 105mm HMC passes through Soissons on 29 August 1944. This is an 1943 intermediate production vehicle with the heavy duty suspension bogies, the armored side flaps and other features.



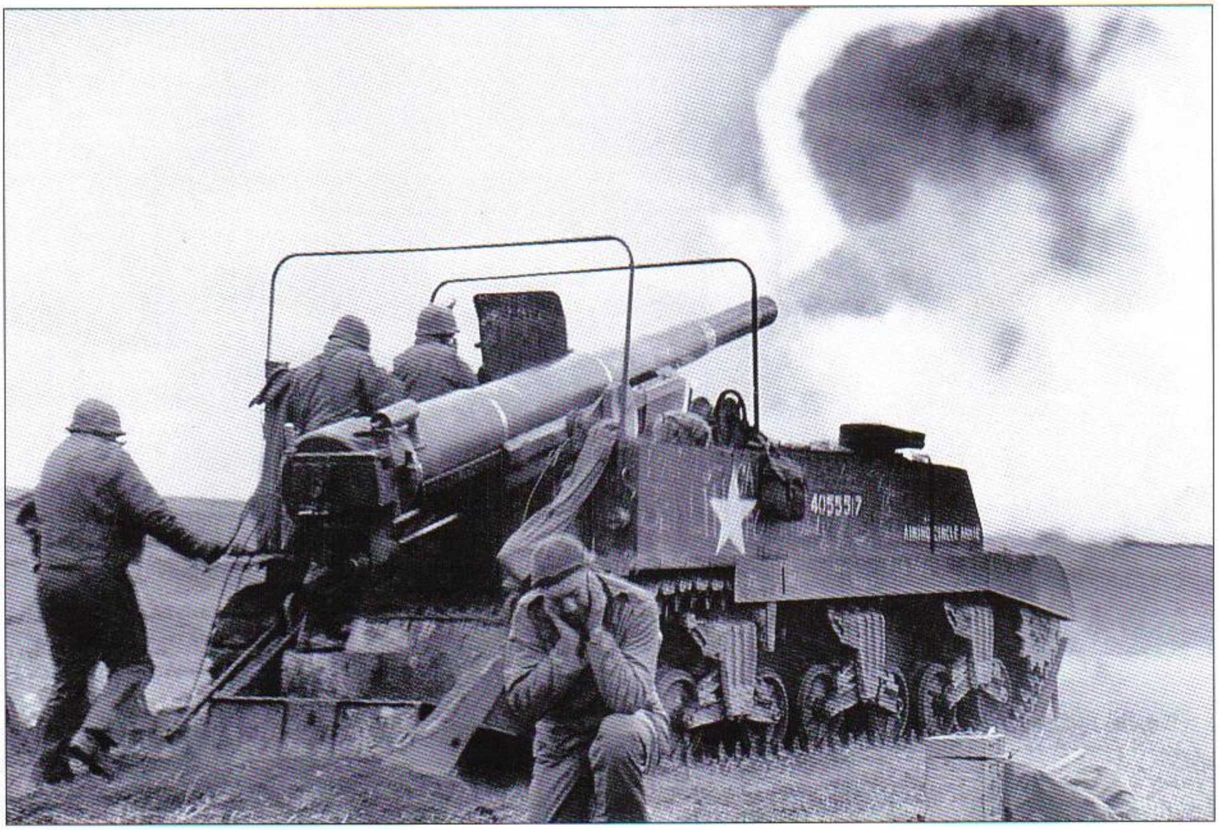
A M7 105mm HMC crosses a treadway bridge over the Aisne river near Soissons on 30 August 1944. This is from the final production 1944 batch of M7 105mm HMC which had the E8546 one piece transmission cover and other improvements.



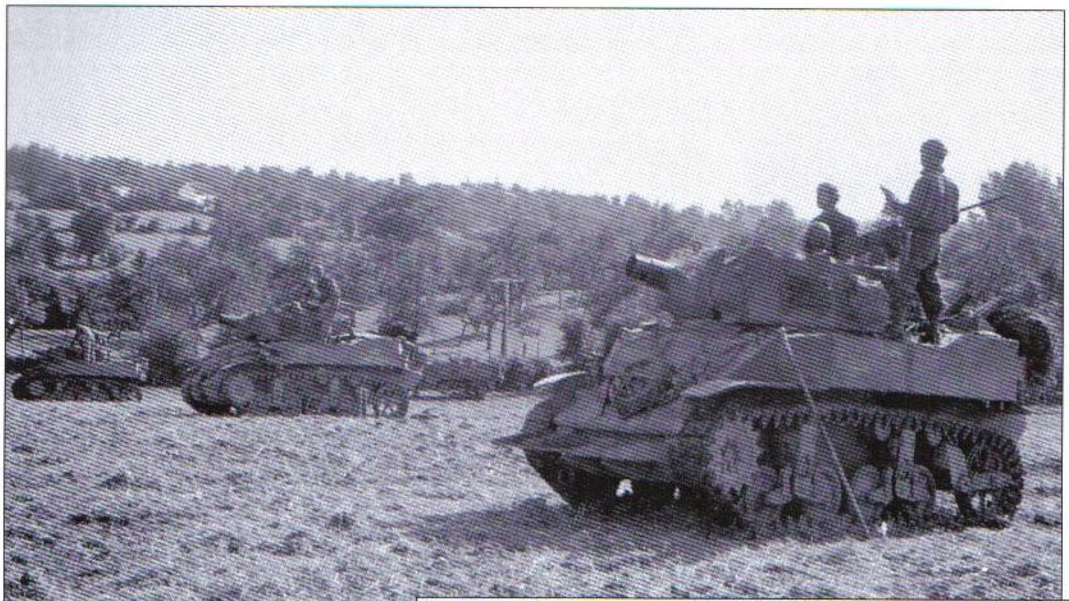
A Seventh Army M7 105mm HMC crosses a hastily repaired bridge near Remiremont on 24 September 1944. Typical of vehicles which had served in Italy, it is a 1942 production vehicle upgraded in the field with a piece of armor welded behind the machine gun pulpit to extend the side panel upward to cover the hull ammunition racks, and also refitted with the later suspension bogies.



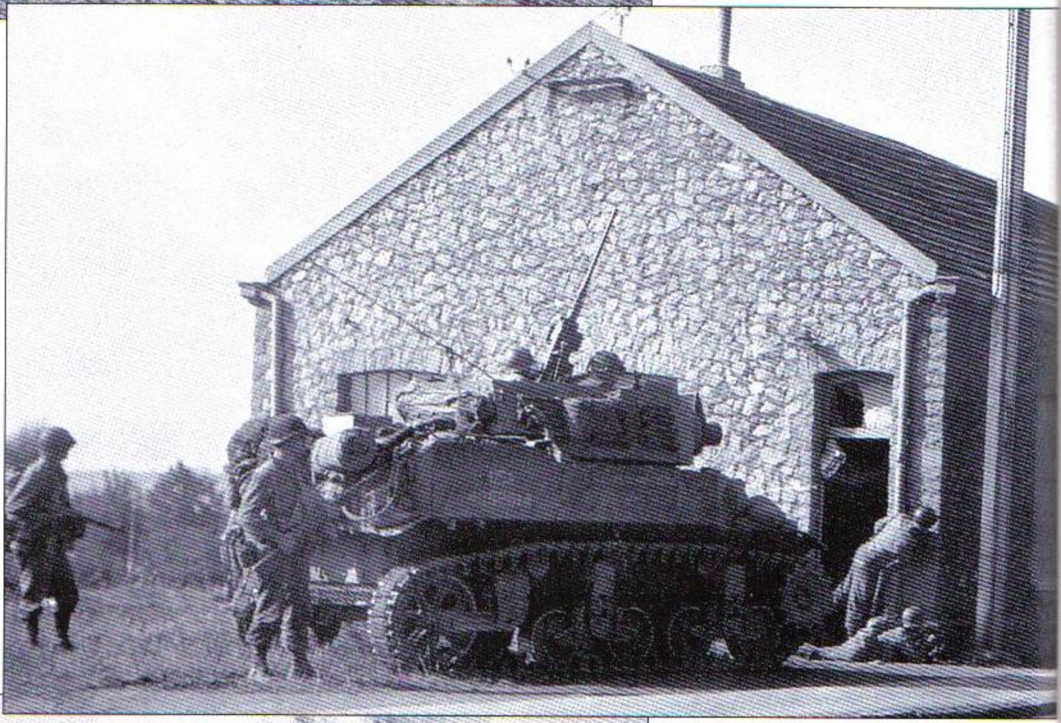
Following the collapse of the German army in France in August 1944, the Allied armies raced into Belgium and the Netherlands. Here, a pair of M8 75mm HMC conduct a fire mission on the outskirts of Vic sur Aisne in September 1944. The Belgian townspeople frequently chalked greetings on the side of tanks and other armored vehicles after they were liberated as seen here.



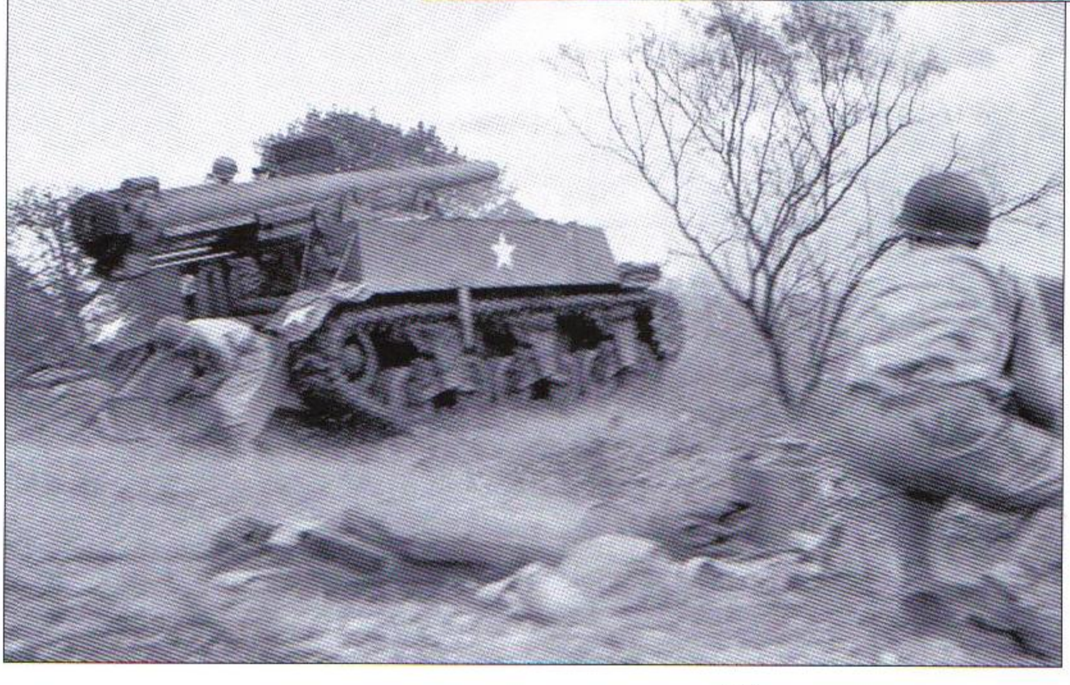
A M12 155mm GMC named "Aiming Post Annie" fires on targets in Germany from its position in Belgium along the Moselle river on 8 September 1944. The M12 155mm GMC was the first US artillery weapon to fire on Germany in 1944. Chalked on the side of the vehicle are inscriptions from Belgians celebrating their liberation when the US Army drove through one of the neighboring towns.



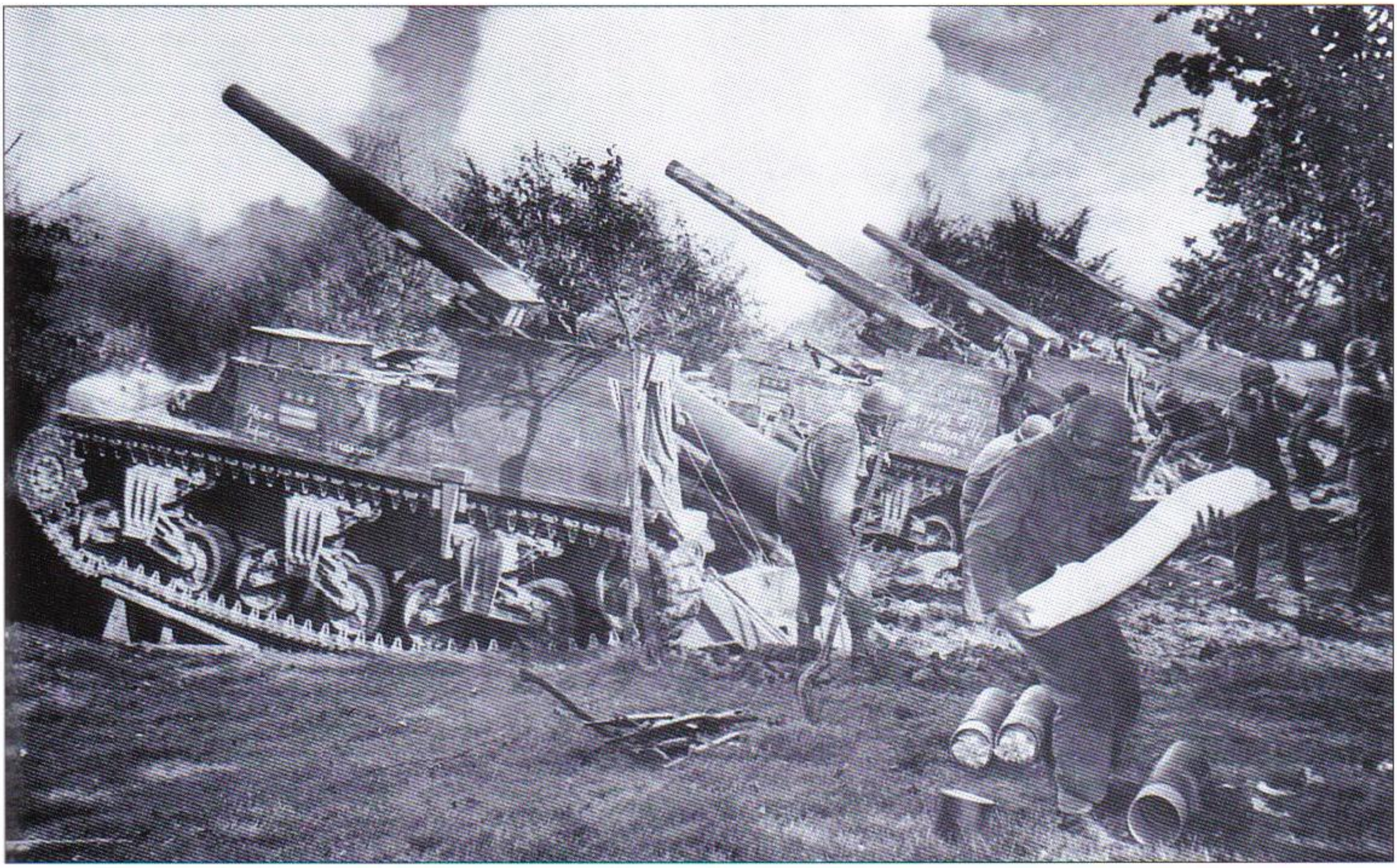
A troop of M8 75mm HMC from th 113th Cavalry Reconnaissanc Squadron prepare to conduct a fir mission near Heure-le-Reman, Belgiu on 9 September 1944. The vehicle i the foreground is still fitted with th Culin hedge-row cutters attache before Operation Cobra in late July.



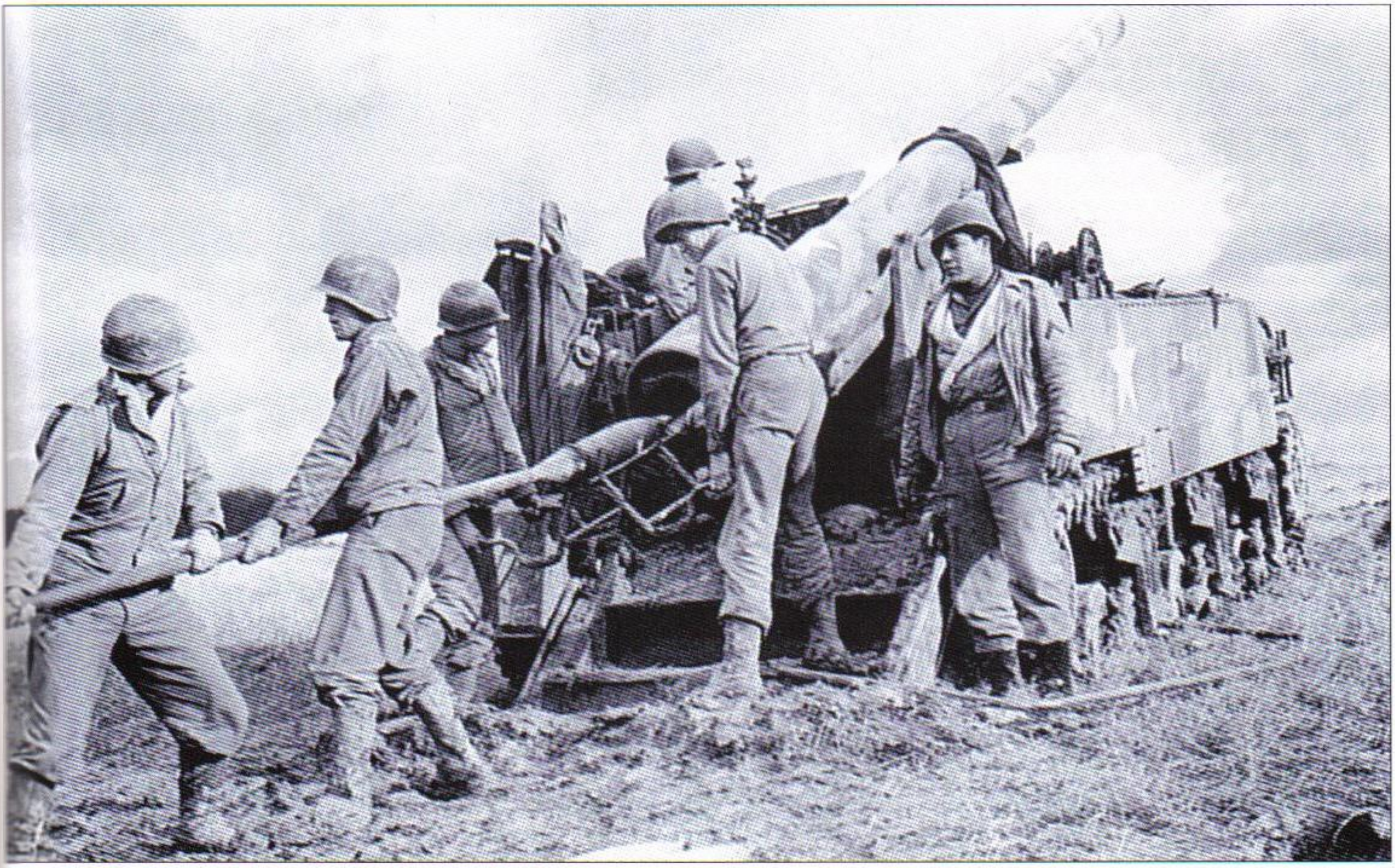
A M8 75mm HMC from a divisional cavalry reconnaissance platoon from the 30th Division scouts along a road near Vise, Belgium on 11 September 1944. The two GIs behind the vehicle are probably from an accompanying infantry unit as cavalrymen were armed with the M1 carbine, not the M1 rifle.



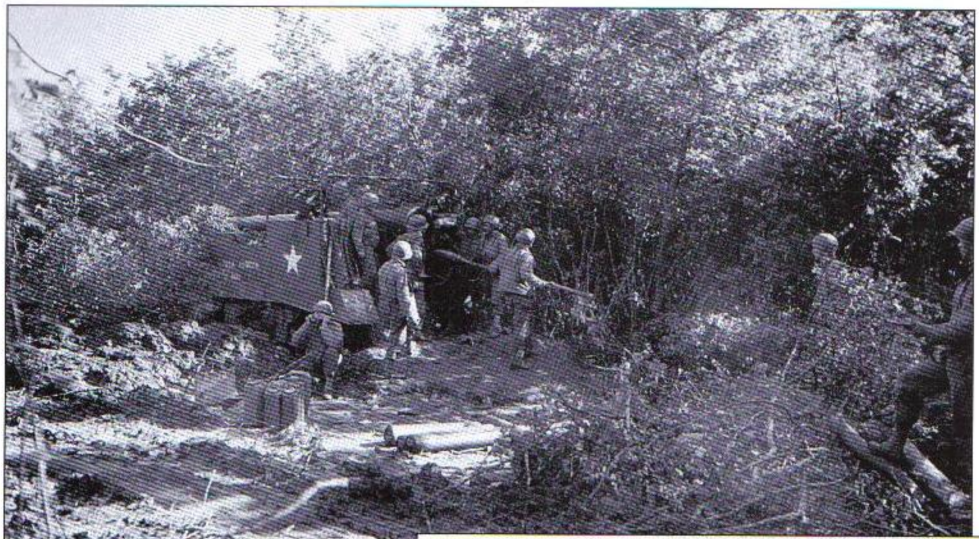
A M12 155mm GMC in full recoil as the crew braces themselves. The M12 155mm GMC was widely used during the autumn 1944 campaign for attacking German pillboxes and fortified positions along the Siegfried line.



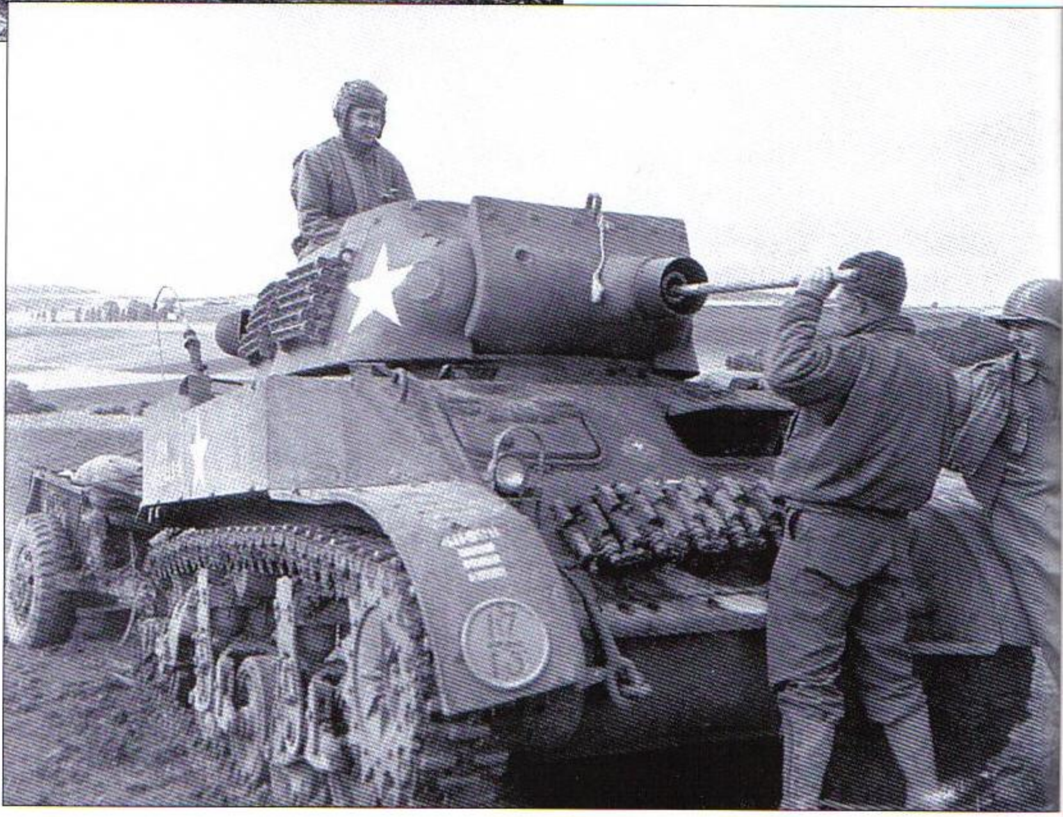
A battery of M12 155mm GMC from the 991st Field Artillery Battalion conduct a fire mission near Bildohen on the approaches to Aachen in September 1944. The vehicles have been driven up improvised ramps to get greater elevation for their guns. The limited elevation of the 155mm gun was one of the main drawbacks of using this weapon. The gunner to the right is carrying one of the propellant bag charges for the gun.



The crew of a M12 155mm GMC load a 155mm projectile into the breech. The 155mm GPF used a two part round, with the propellant being loaded as separate bag charges.

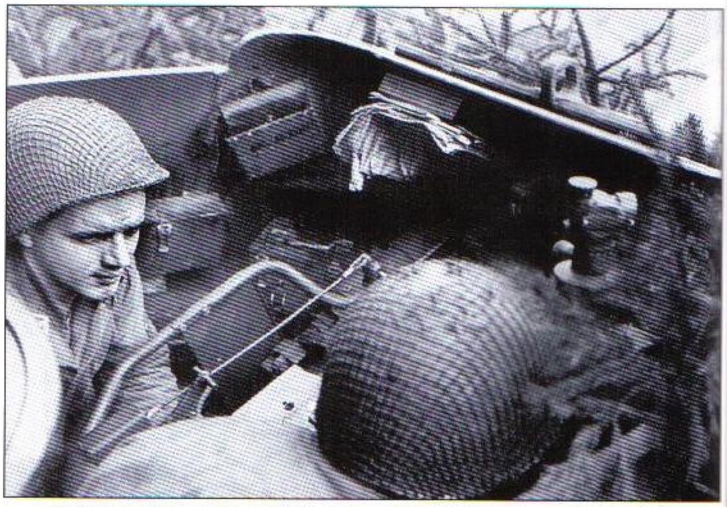


The crew of a M12 155mm GMC nicknamed "The Babe" loads a round into the gun during the bombardment of Ft. Driant, part of the Metz fortifications, during Patton's ill-fated campaign around the city on 10 October 1944. The heavily fortified border city was a thorn in Patton's side for most of the autumn of 1944.

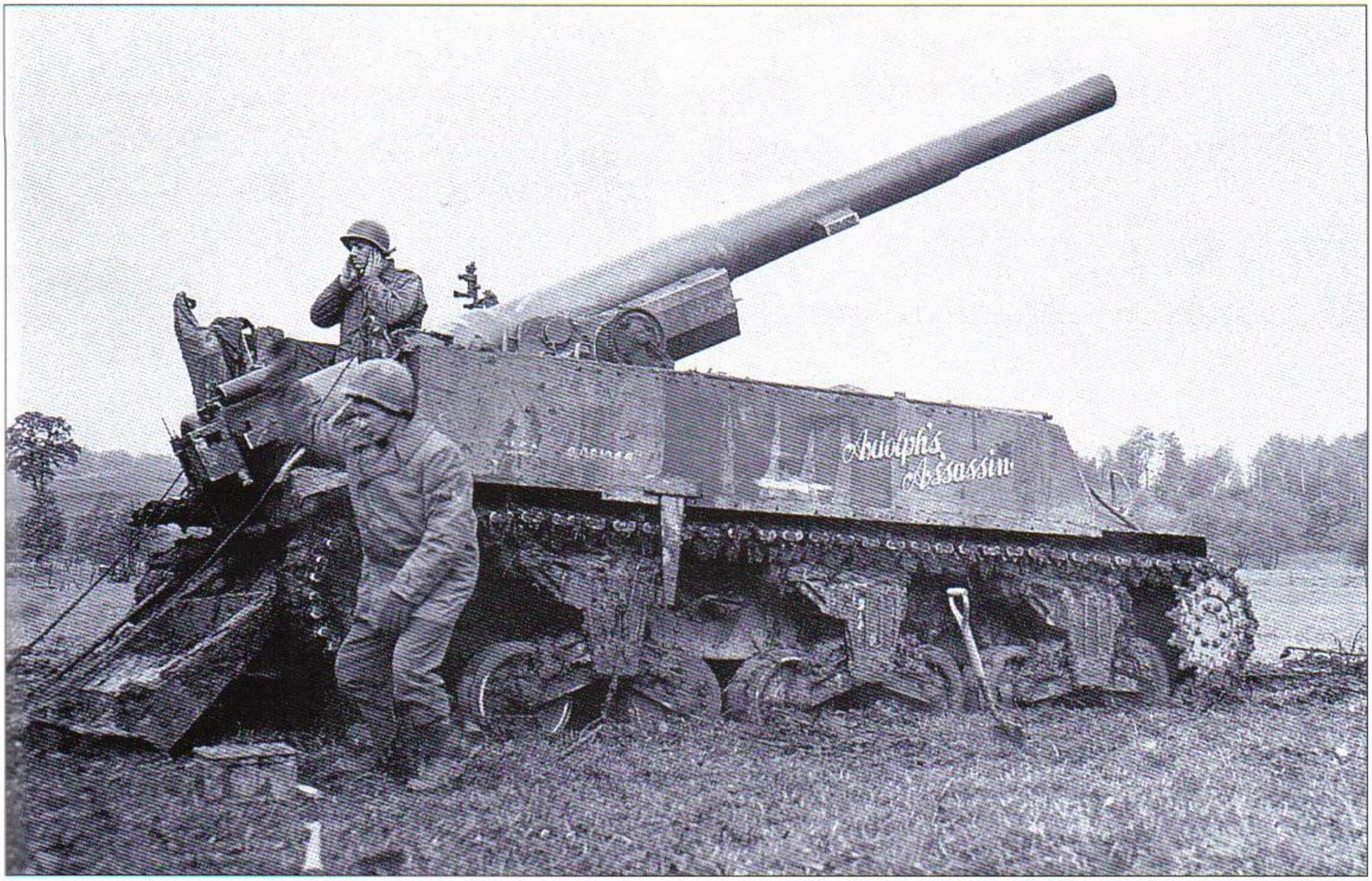


A M8 75mm HMC crew of Co. E, 2nd Cavalry Group cleans out the barrel of their vehicle during a lull in the fighting near Ploy, France on 14 October 1944. The bridging marking on the mud guard gives the vehicle weight with or without the M8 ammunition trailer. The three colored bars above it are the unit's quartermaster shipping markings, 48899, which means that the bars are white.

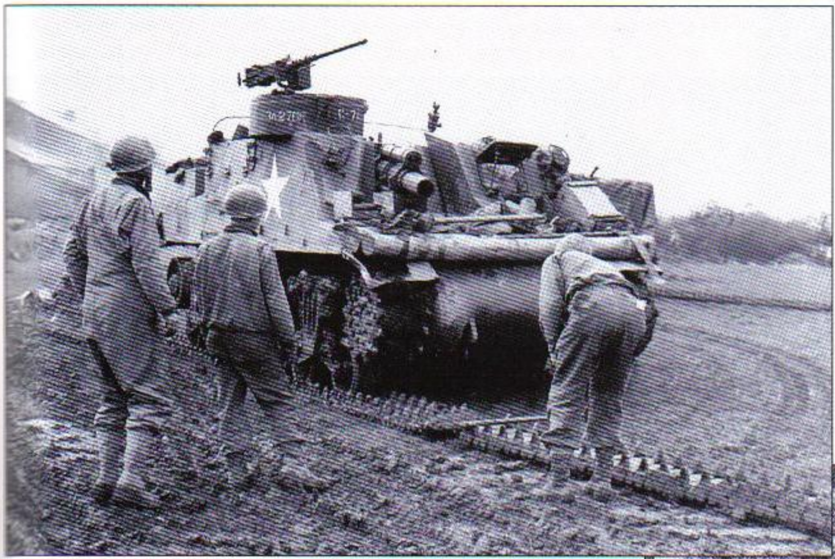
The crew of a M8 75mm HMC of Co. E, 2nd Cavalry Group prepare for a fire mission near Ploy, France, on 14 October 1944. The crew is lined up in a chain to pass ammunition from the M10 ammunition trailer to the howitzer crew.



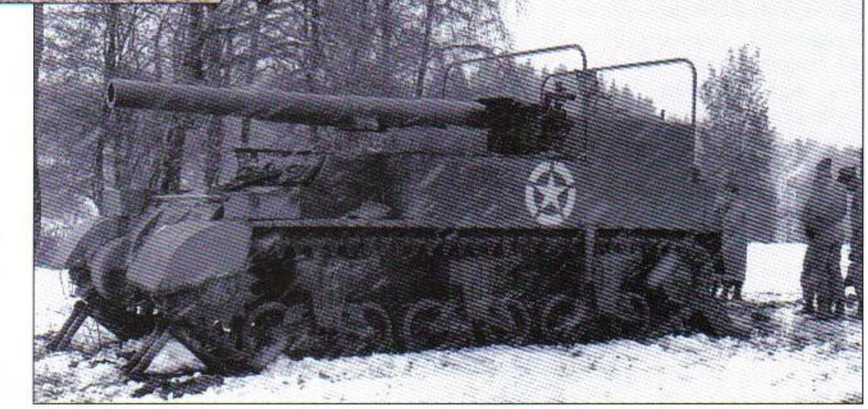
This photo provides a clear idea of how cramped the turret of the M8 75mm HMC was with the full crew in place. This is a vehicle from the 24th Cavalry Reconnaissance Squadron near Monshau, Germany on 20 October 1944.



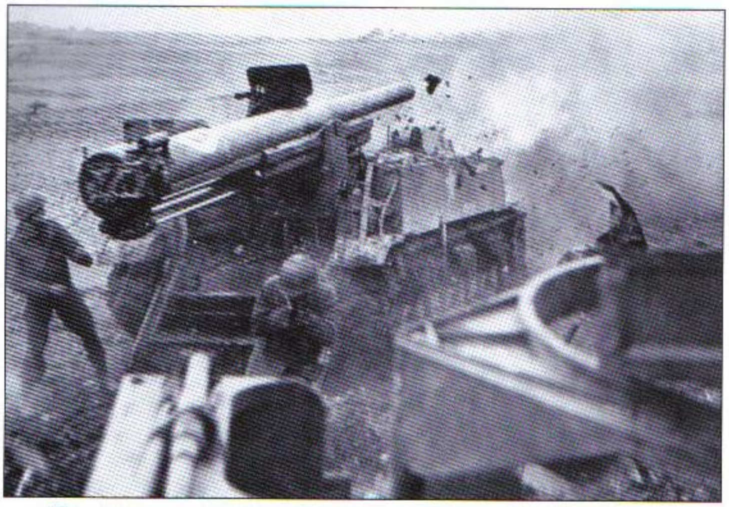
A M12 155mm GMC nicknamed "Adolph's Assassin" from Battery A, 991st AFAB prepares to fire near Kornelmunster, Germany on 4 November 1944. This view shows the 155mm gun elevated near its maximum. By this stage, the battalion's distinctive unit insignia has been painted over.



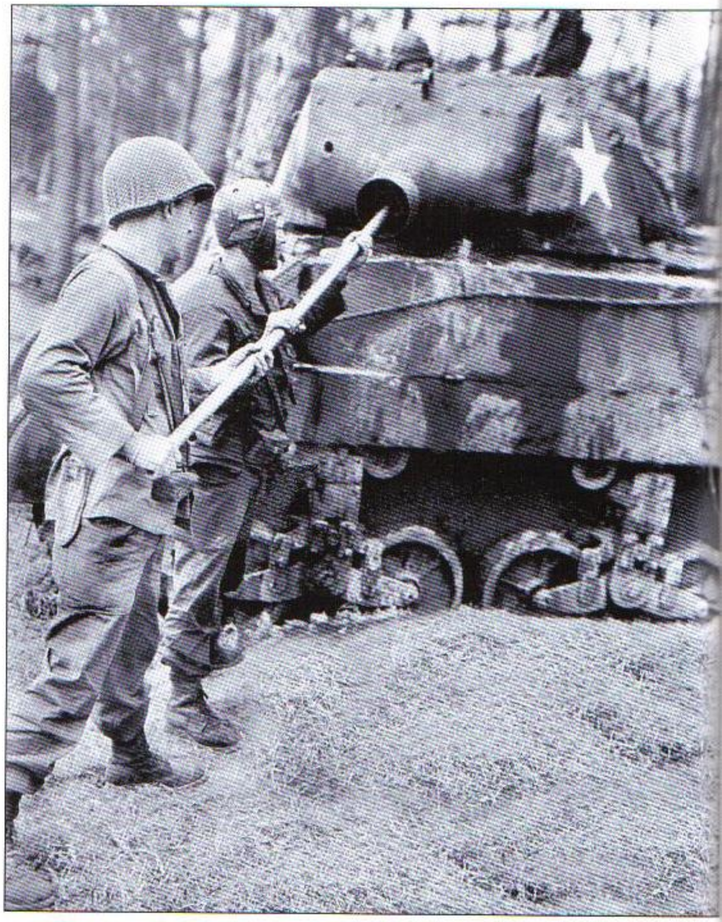
The crew of a M7 105mm HMC of the 276th AFAB repair the tracks on their vehicle near Metz, France in November 1944 while supporting the 6th Armored Division. This is a vehicle from the spring-summer 1942 production run with the E4188 transmission cover, rebuilt with later features including the heavy duty suspension and the side armor flaps.



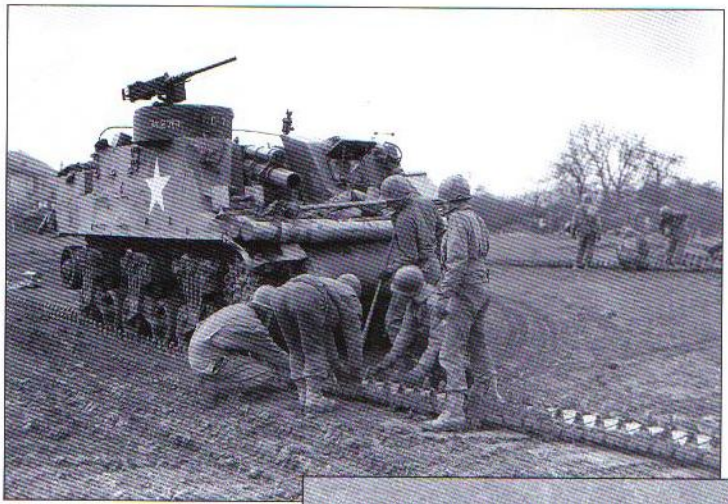
A M12 155mm GMC of Battery C, 557th Field Artillery Battalion, near Morteau, France on 15 November 1944. This photo shows the recoil chocks placed under the front tracks, and also shows the hoops for the camouflage net erected over the gun compartment. This vehicle is unusual in that it is still fitted with the front portion of the sand skirts, a feature not commonly seen on the M12 155mm GMC in Europe.



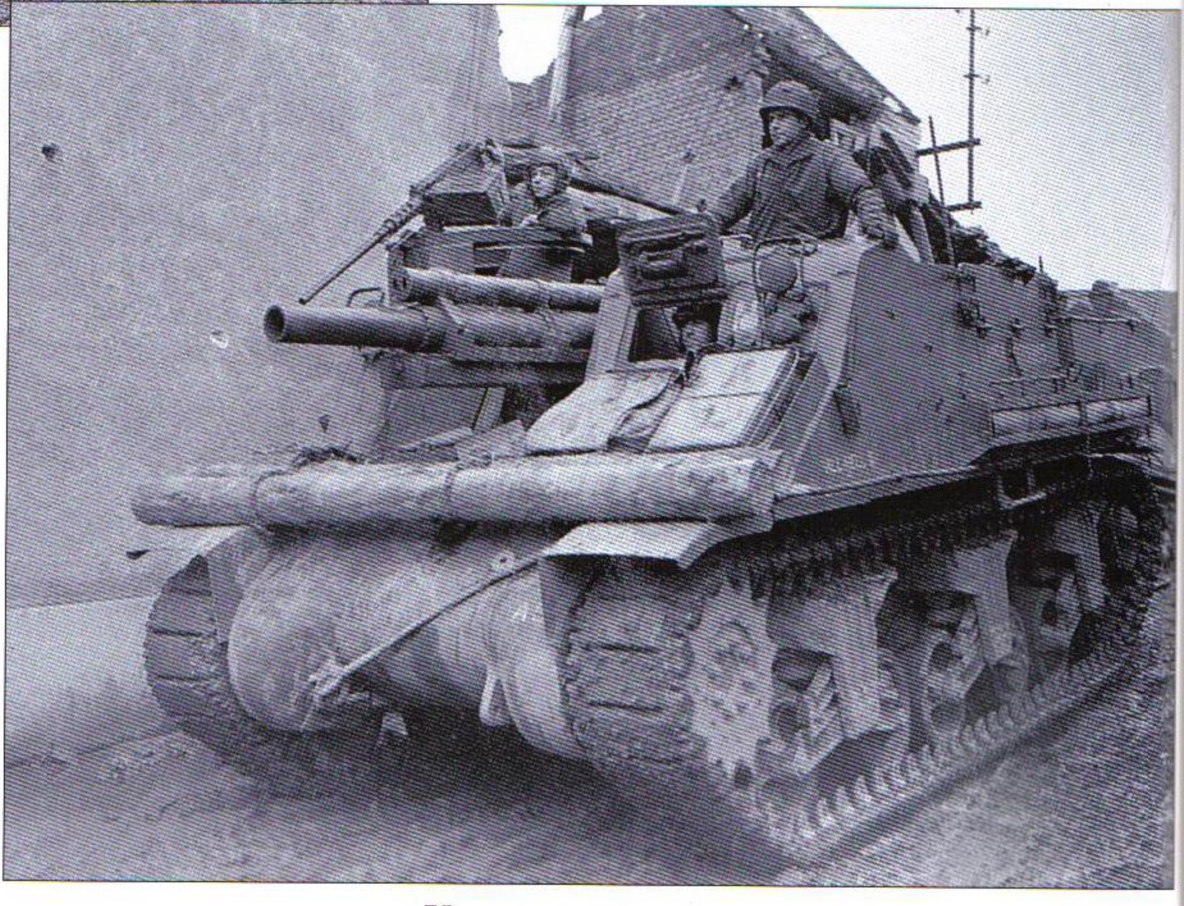
The 155mm gun of this M12 155mm GMC is in full recoil as it fires on a German pillbox near Grossenich, Germany on 16 November 1944. The substantial amount of gas created by firing kicked up quite a storm of mud and dirt in front of the vehicle when fire at low elevation.



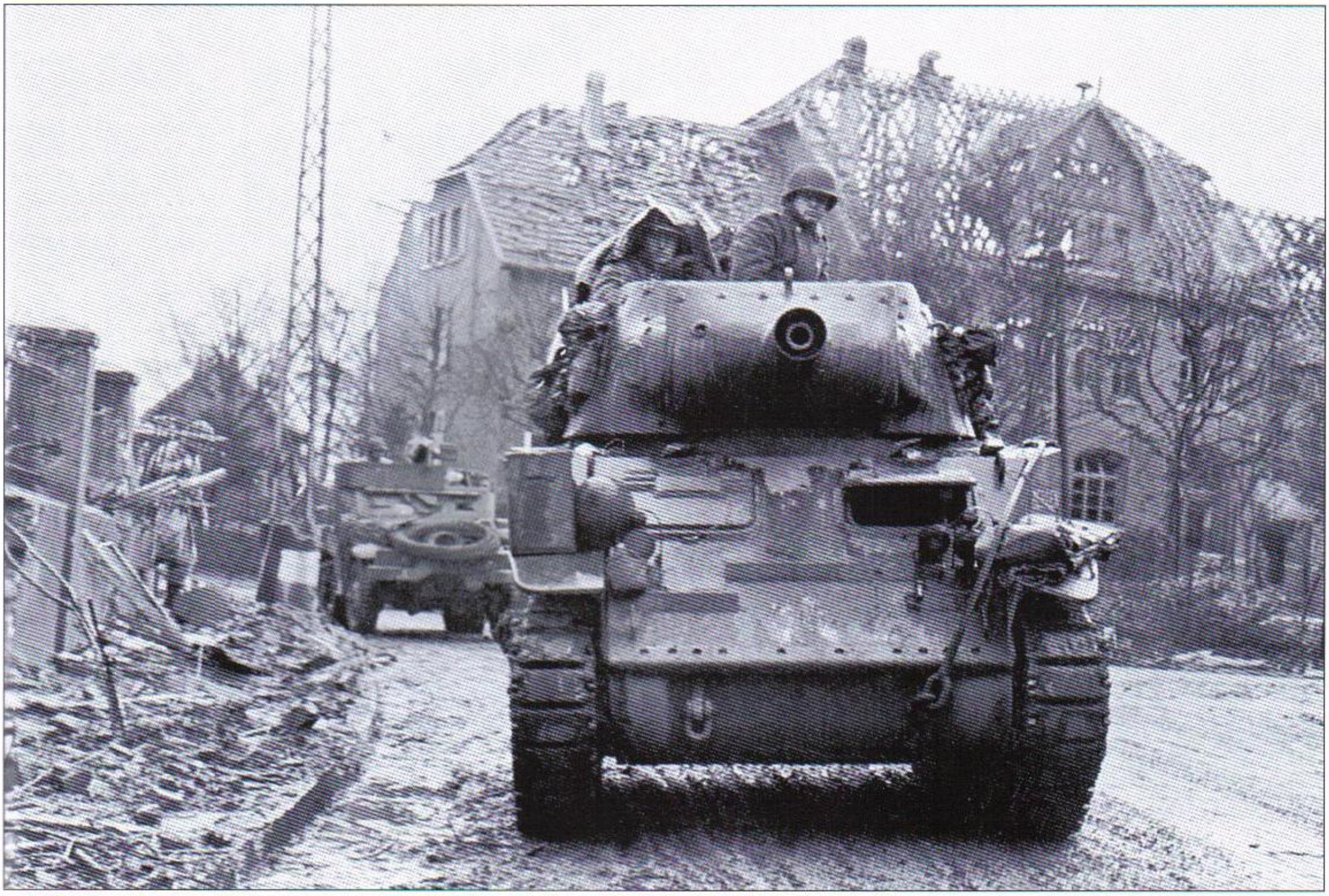
The crew of a M8 75mm HMC do their daily chores including swabbing out the barrel of the vehicle's 75mm howitzer.



The crew of a M7 105mm HMC of Battery C, 276th AFAB, 6th Armored Division do track repair near Brulange, France on 17 November 1944. This is an intermediate production vehicle from the winter 1942 production run with the heavy duty suspension and the side armored flaps alongside the ammo bins.

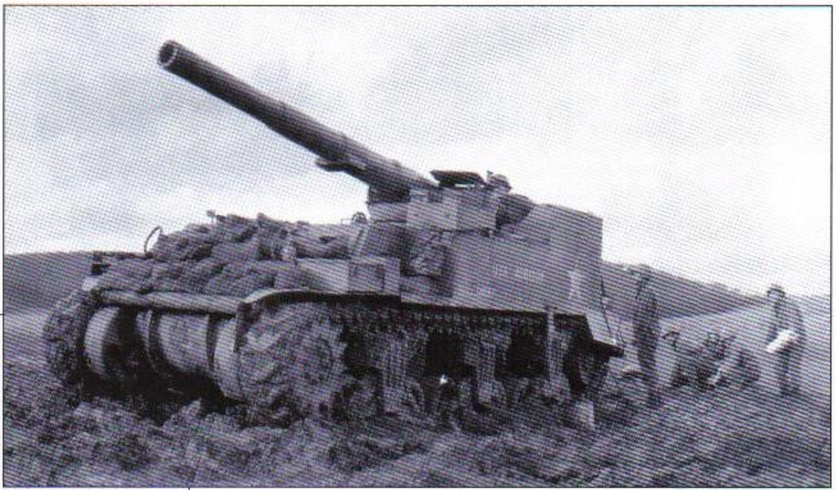


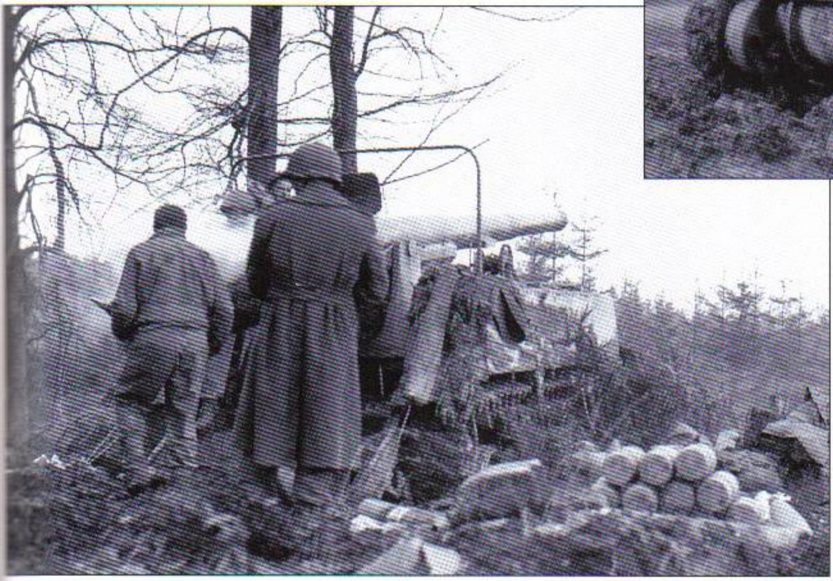
A M7 105mm HMC of the Battery A, 78th AFAB, 2nd Armored Division passes through Beggendorf, Germany on 18 November 1944 during the fighting with the 9.Panzer Division. This vehicle is an intermediate production type with the E4188 transmission cover, D47527 vertical volute suspension, and armored flap for the side ammunition racks. Like most 2nd Armored Division M7 105mm HMC, it has a rear stowage rack added similar to those on half-tracks.



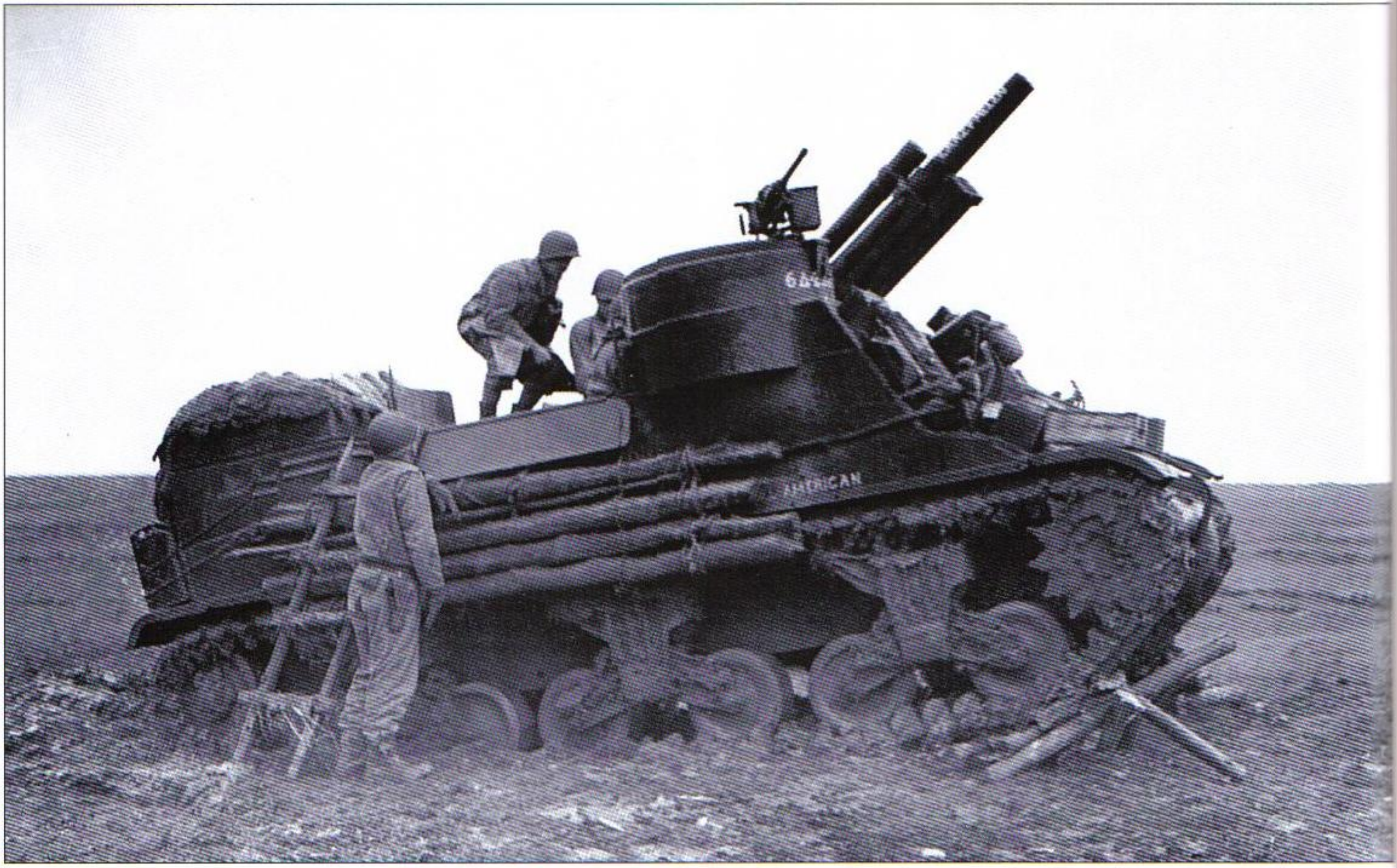
A M8 75mm HMC of the 82nd Armored Reconnaissance Battalion, 2nd Armored Division leads a column through Setterich, Germany on 20 November 1944 during the fighting with the 9.Panzer Division. The open turret of the M8 75mm HMC left the crew exposed to the wet autumn weather, and a tarp was often draped over the opening to shield against the cold rain.

A M12 155mm GMC nicknamed "Buccaneer" prepares for a fire mission in France on 25 November 1944. The crew waits behind with another round, and the gunner at the far right can be seen holding another propellant bag charge.

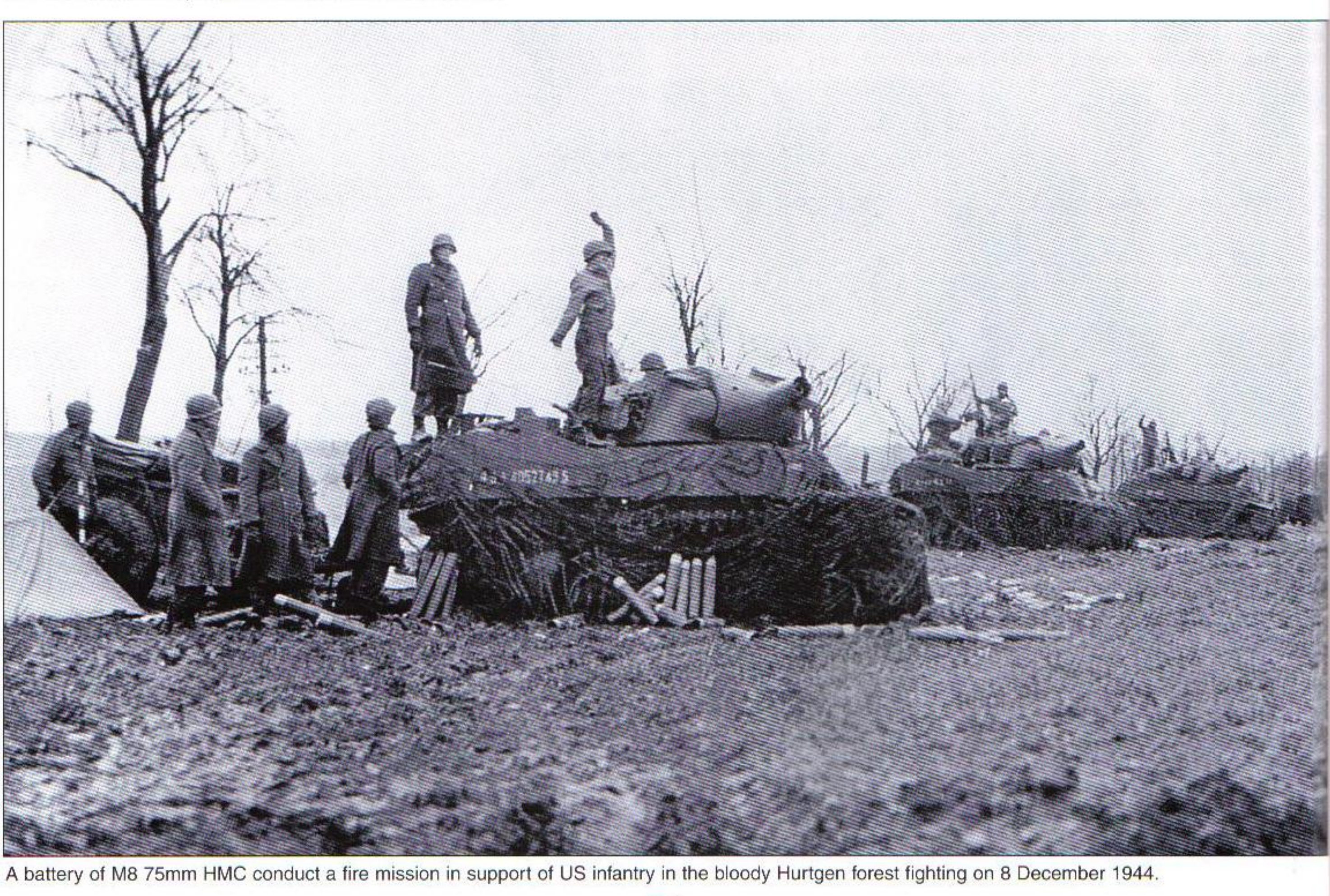




A M12 155mm GMC of the 981st Field Artillery Battalion provides fire support for US infantry formations during the bloody battles for the Hurtgen forest near Kleinhau, Germany on 30 November 1944.

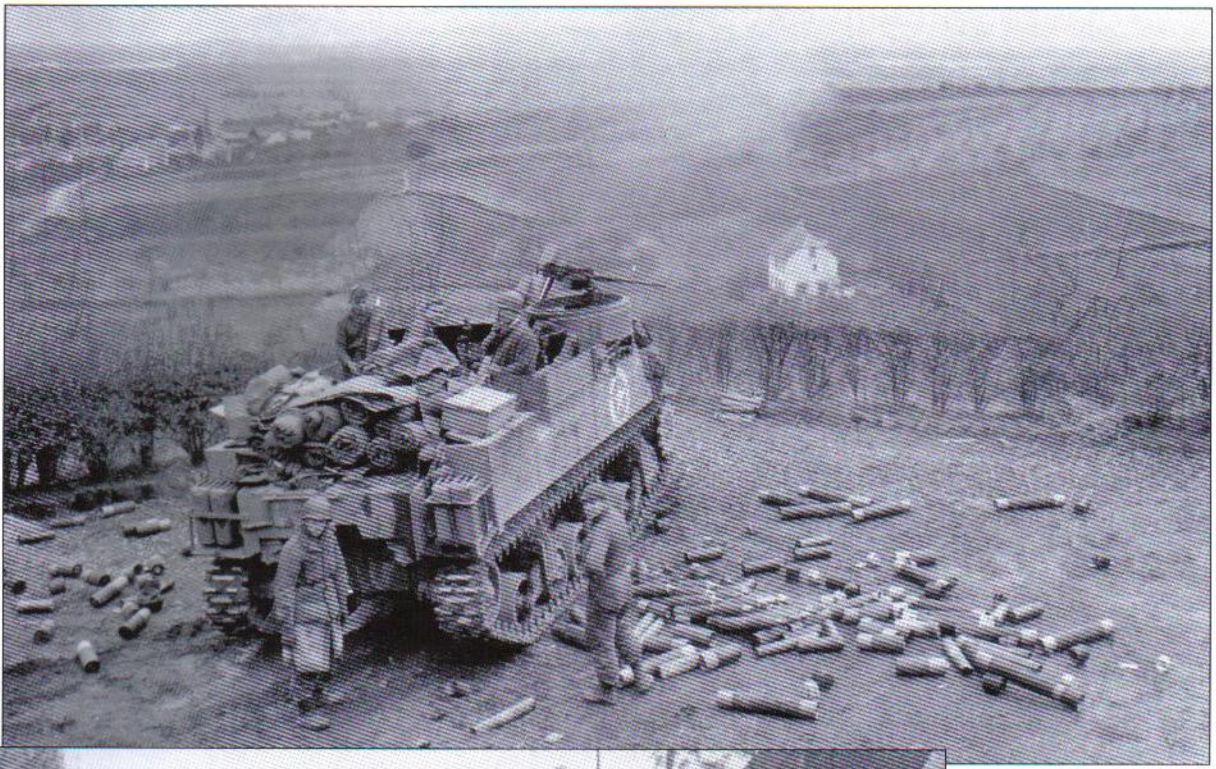


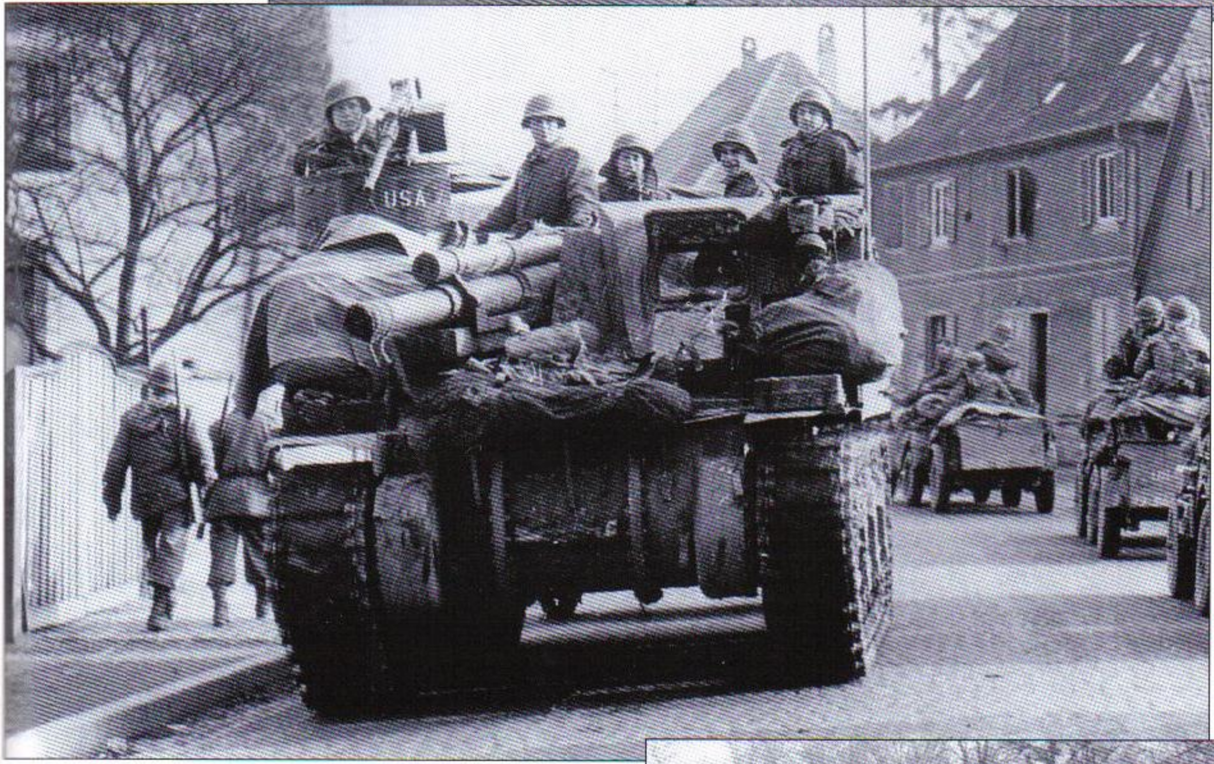
A M7 105mm HMC nicknamed "All American" from Battery A, 231st AFAB, 6th Armored Division has been positioned on an improvised ramp to get higher elevation during a fire mission near Kleinbittersdorf, Germany on 7 December 1944. The logs on the side were a common sight in the autumn of 1944 and were used to help extract vehicles from the thick mud.



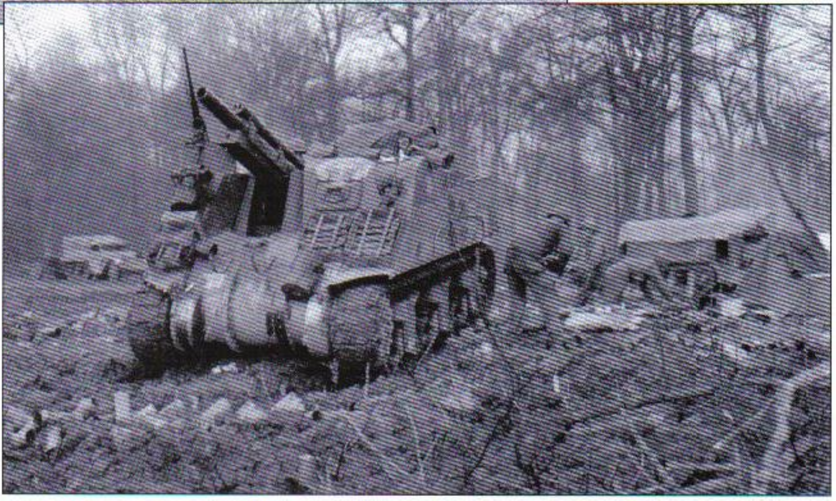
A battery of M8 75mm HMC conduct a fire mission in support of US infantry in the bloody Hurtgen forest fighting on 8 December 1944.

A M7 105mm HMC of the 143rd Cannon Company, 36th Division conducts fire mission on the outskirts of Ribeauville, France on 9 December 1944 with the ground nearby littered with propellant casings and fiberboard shipping tubes.



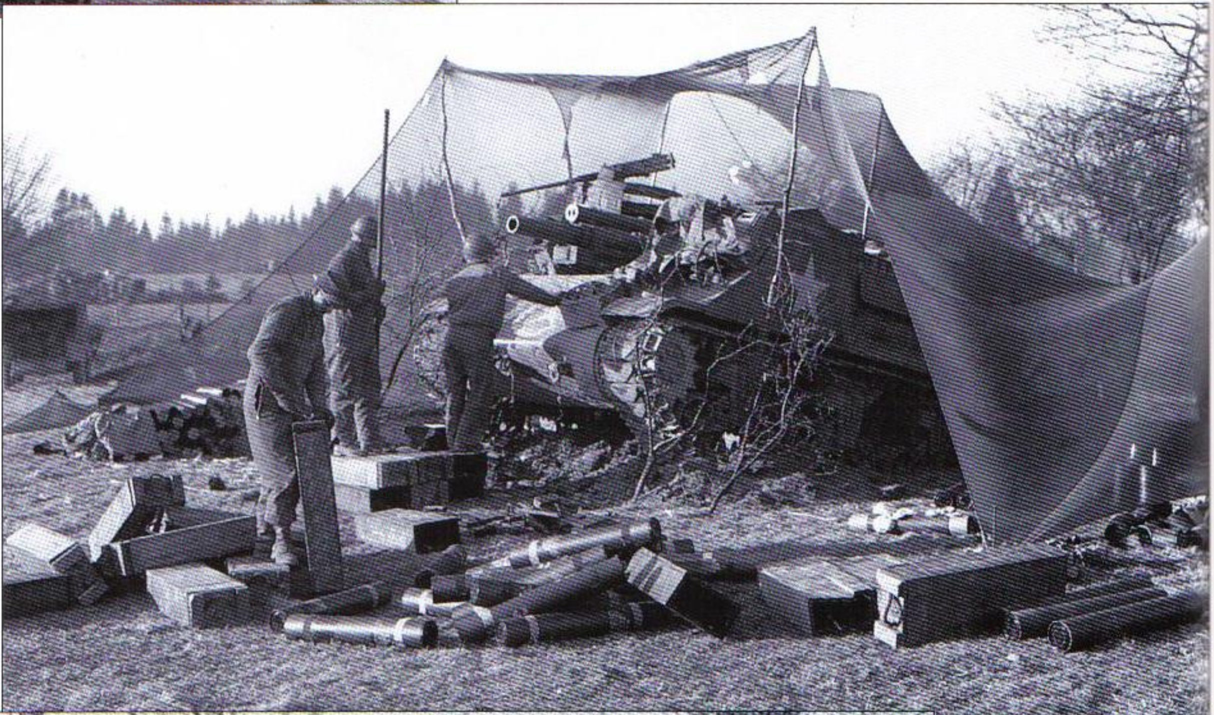


A M7 105mm HMC moves through Hagenau, Germany during the fighting along the German border on 15 December 1944 in the days before the Ardennes offensive.

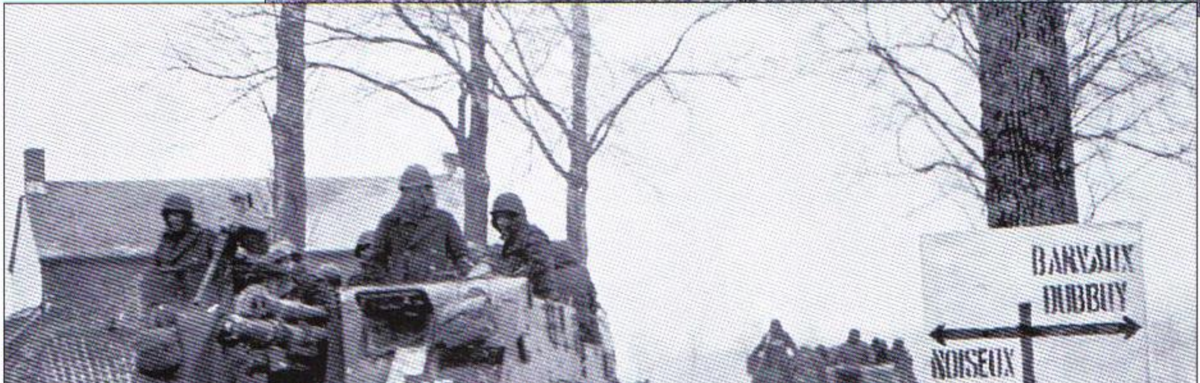


A M7 105mm HMC of the French 2nd Armored Division conducts a fire mission while emplaced near Erstein on the Franco-German border on 24 December 1944. The ground nearby is littered with spent casings and fiberboard packing tubes.

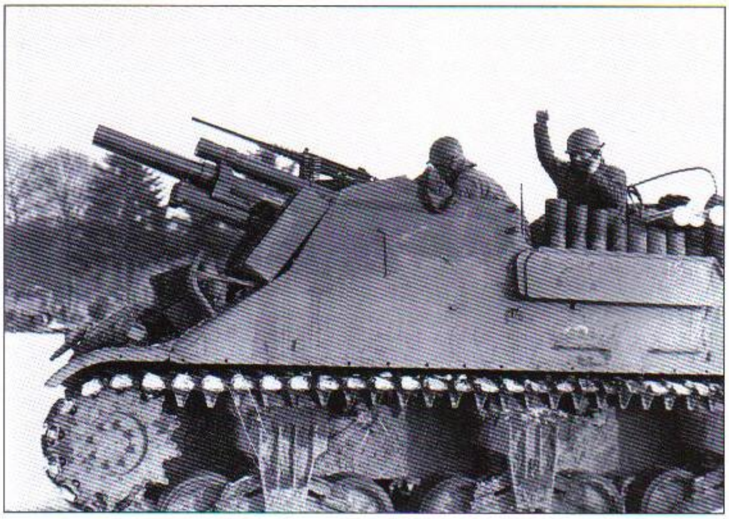
Although not the clearest shot, this photo shows a dramatic moment during the Battle of the Bulge as this M7 105mm HMC has been positioned along a road junction leading up to the Elsenborn ridge on 20 December 1944 with the assignment of stopping any approaching German units. The ridge was the key defensive position along the northern salient of the Bulge, and the failure of the 6.SS Panzer Army to seize the ridge forced the Germans to turn their attention southward towards Bastogne.



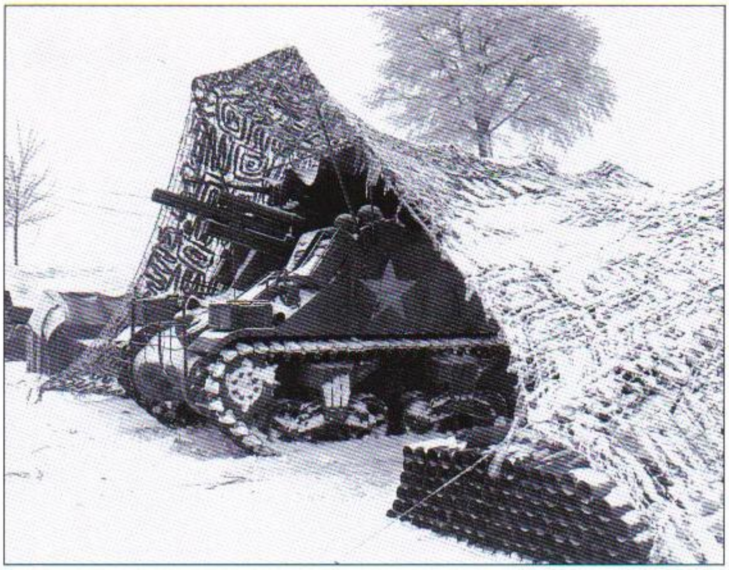
The crew of a M7 105mm HMC of the 7th Armored Division prepare ammunition while waiting for a fire mission during the fighting near Manhay, Belgium on 27 December 1944. The 105mm ammunition came packed two per wooden box with each round encased in the black fiberboard tubes seen here. The M7 105mm HMC seen here is one of the late production types manufactured in 1944.



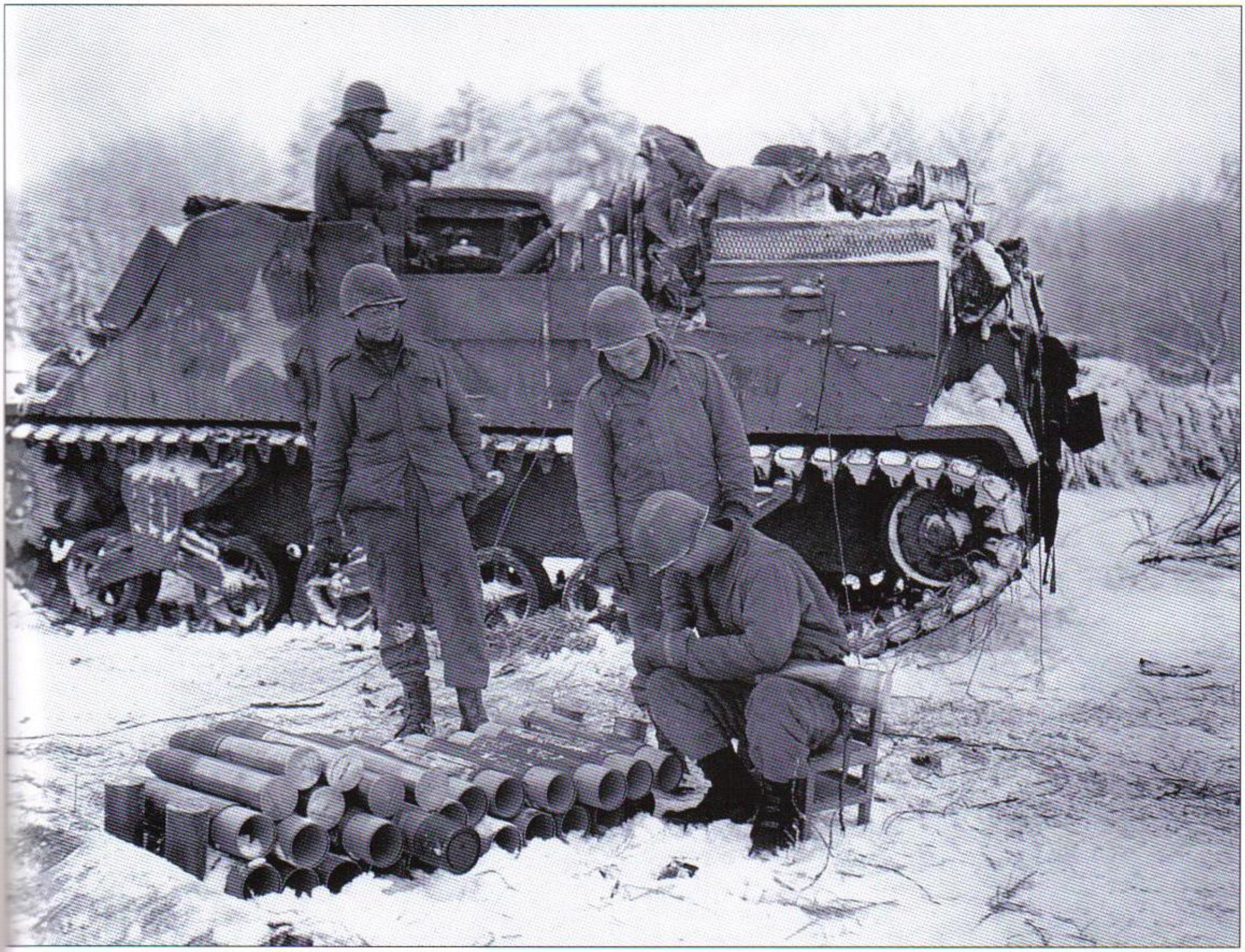
A M7 105mm HMC of Battery B, 92nd AFAB, 2nd Armored Division leads the way through Monteuville, Belgium on 2 January 1945. This is an intermediate production vehicle from the autumn 1942 production run with the E4188 one piece transmission cover with the folding armored side panels and the D47527 vertical volute suspension. Many of the M7 105mm HMC of the 2nd Armored Division were fitted with stowage racks on the rear hull side like those fitted to half-tracks, and this vehicle has duck-bill extended end-connectors for better floatation in the muddy winter conditions.



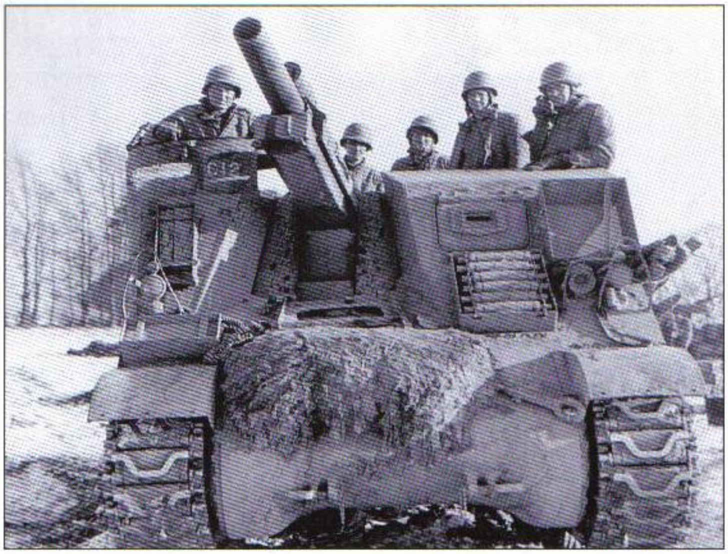
The crew of a M7 105mm HMC of Battery C, 274th AFAB prepare to conduct a fire mission in support of Patton's Third Army near Bastogne on 1 January 1945. The side armored flap is folded down, showing the tops of the fiberboard ammunition canisters in the ammunition racks. This vehicle is also fitted with duckbill extended end connectors.



A M7 105mm HMC of the 212th AFAB, 6th Armored Division rests under a camouflage net while conducting fire missions near Bastogne on 8 January 1945. During the Ardennes fighting, this battalion set a record for 105mm battalions for firing 1,000 rounds per day. This vehicle is fairly typical of the 1944 production run, and like many vehicles in the Ardennes, has been fitted with extended end connectors on its tracks for better floatation in snow and mud.

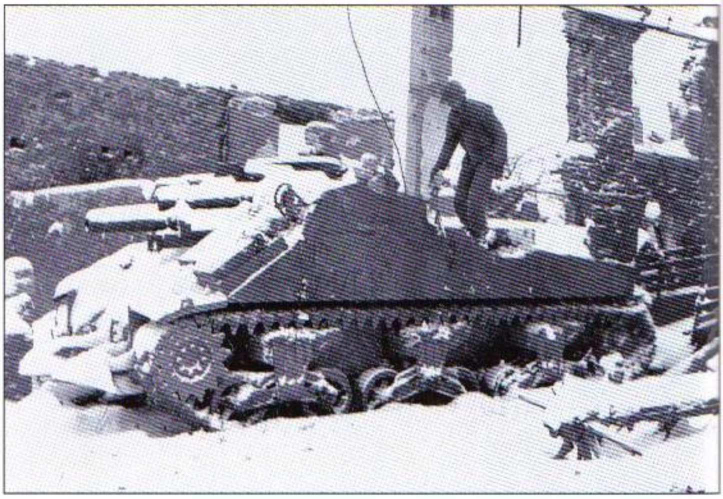


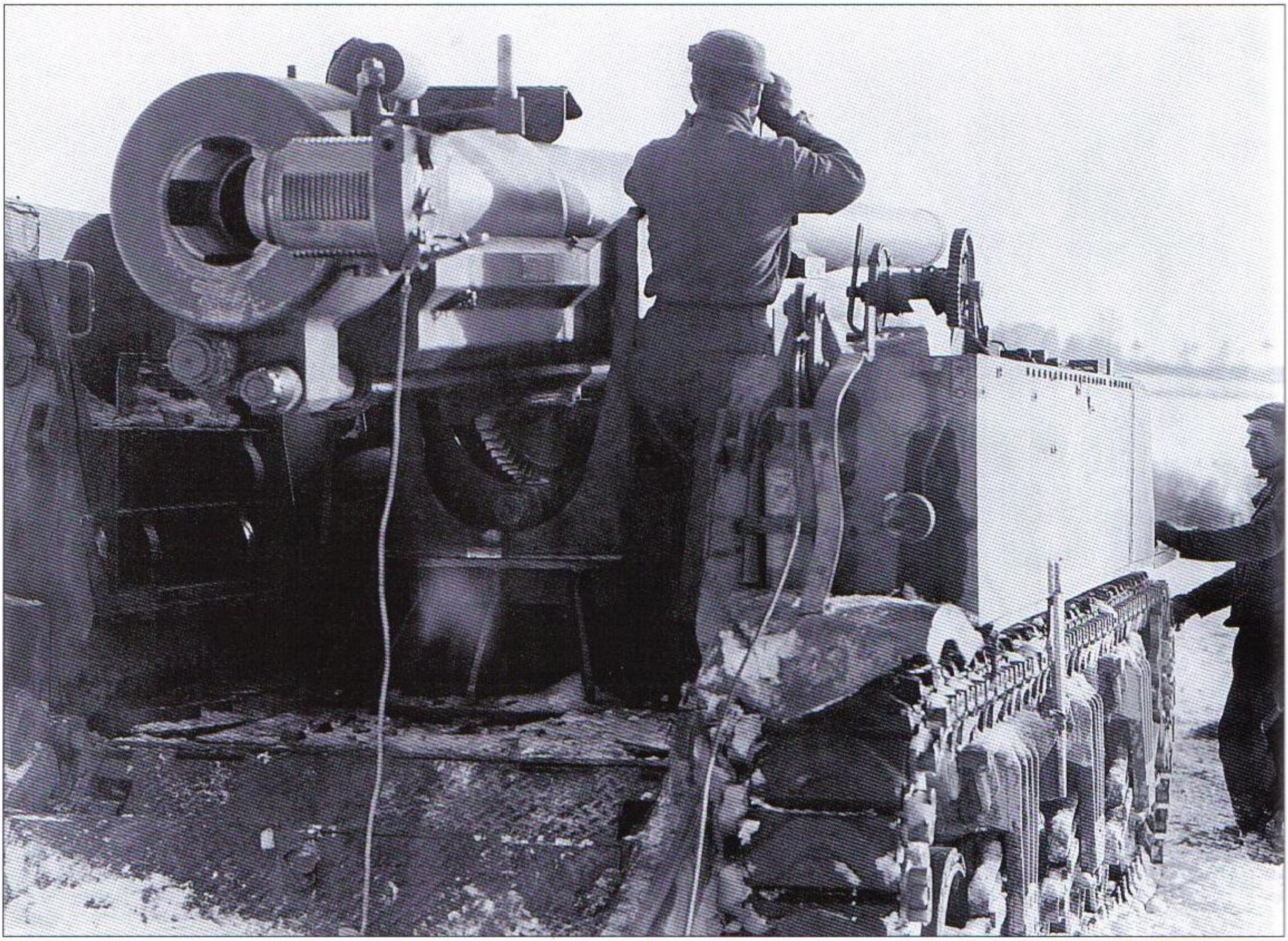
The crew of a M7 105mm HMC of the 274th AFAB set fuzes on their 105mm ammunition prior to a fire mission near Bastogne on 5 January 1945. This is a 1944 production M7 105mm HMC and gives a good view of the improved sponson stowage box on the rear of the vehicle with the new basket fit on top. It will also be noted that the vehicle is fitted with duckbill extended end connectors.



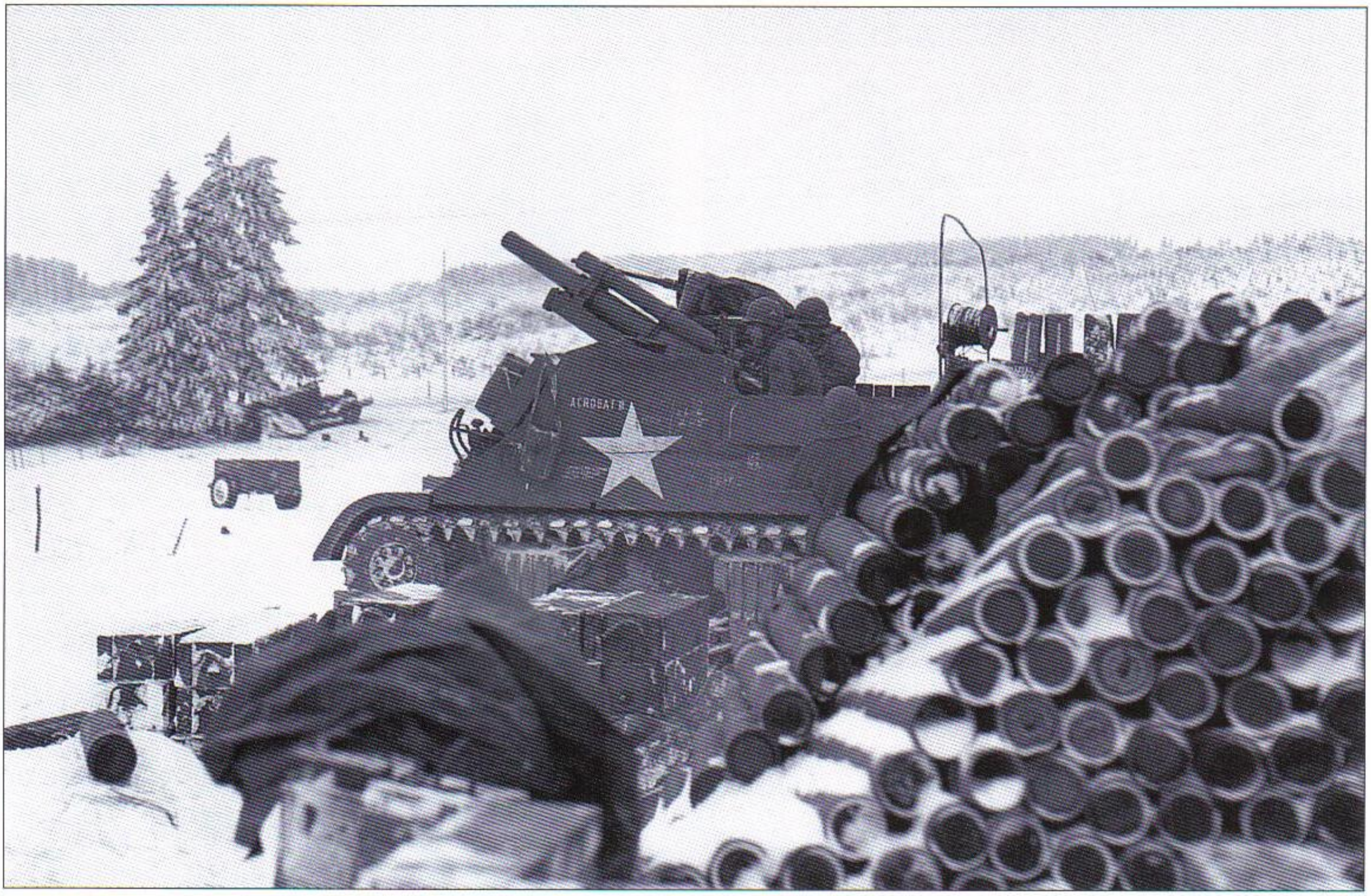
A late production M7 105mm HMC prepares to fire in support of the 101st Airborne Division near Bastogne in late December 1945. The censor has obliterated the unit identification code on the side of the pulpit.

A GI from the 84th Division inspects a M7 105mm HMC knocked out near Marcoury, Belgium during the Ardennes fighting. This is an intermediate production vehicle with the D47527 vertical volute suspension. Curiously enough, it is still fitted with the Douglas device, one of the types of hedge-row cutters developed for Operation Cobra in July 1944. This particular style was most common in the 3rd Armored Division which suggests that this M7 105mm HMC may have served with one of the division's three field artillery battalions.

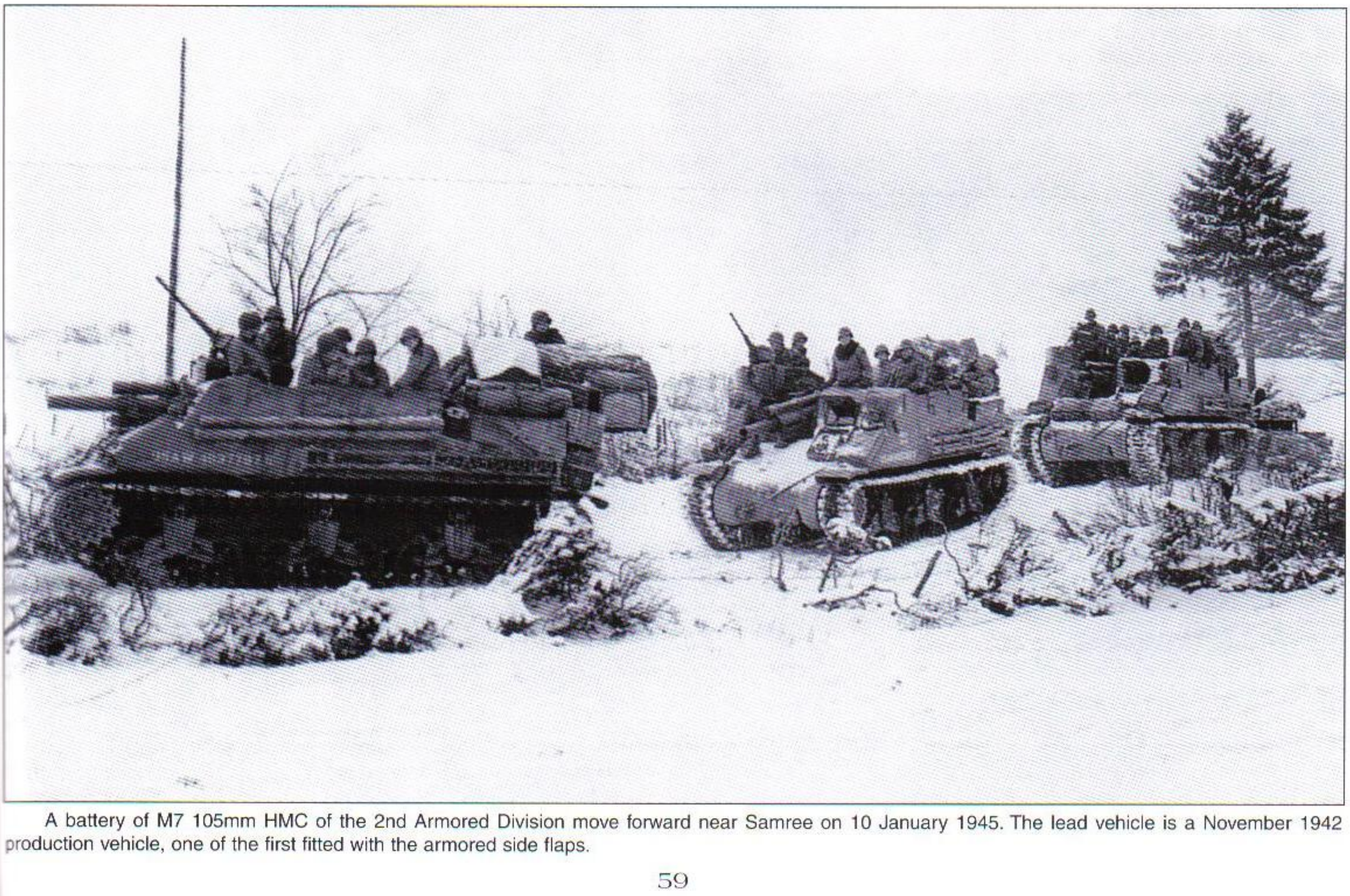




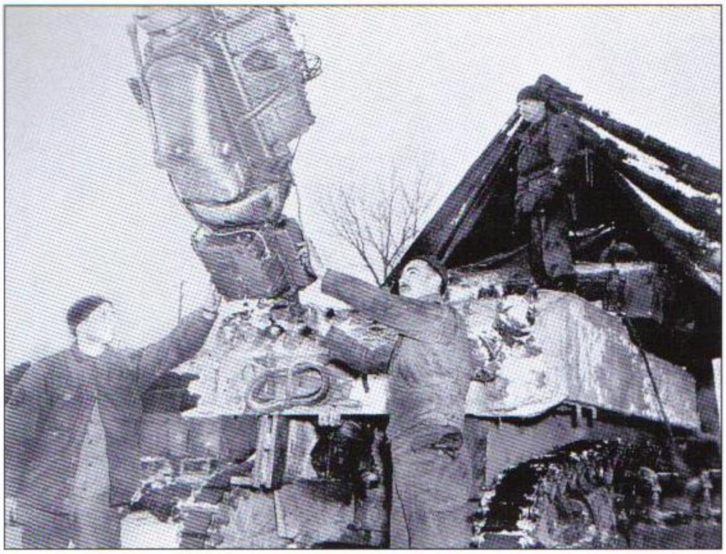
The crew of a M12 155mm GMC prepare their vehicle for action while supporting the 3rd Armored Division around Houfallize in late December 1944.



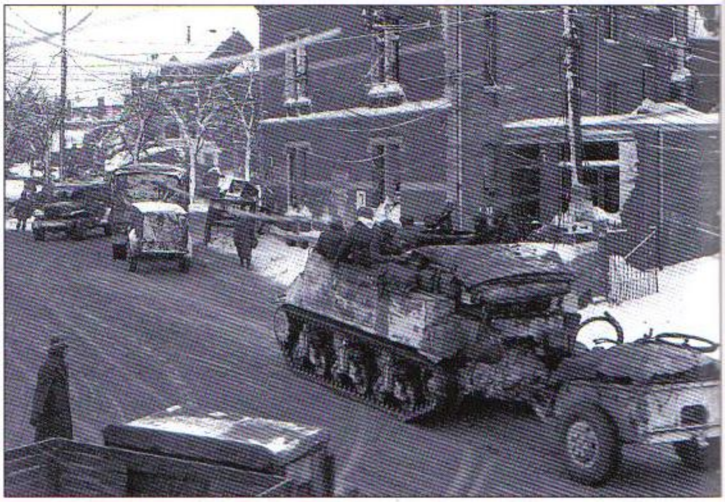
A M7 105mm HMC nicknamed "Acrobat III" of an artillery unit of Patton's Third Army prepares to fire during fighting near Morhet, Belgium on 9 January 1945.



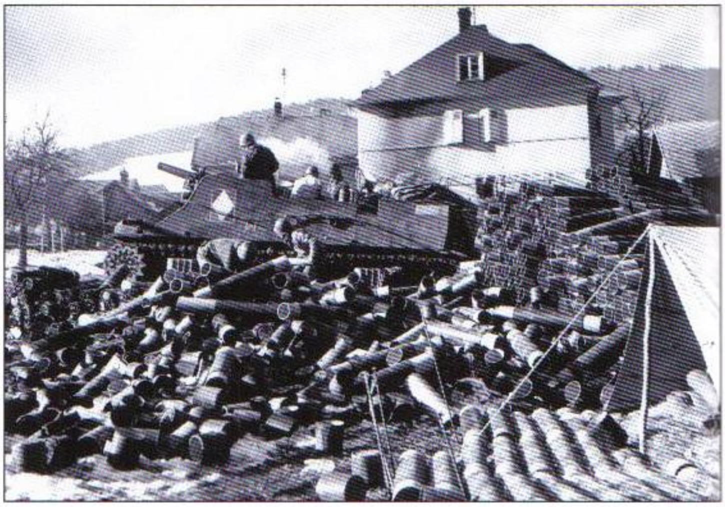
A battery of M7 105mm HMC of the 2nd Armored Division move forward near Samree on 10 January 1945. The lead vehicle is a November 1942 production vehicle, one of the first fitted with the armored side flaps.



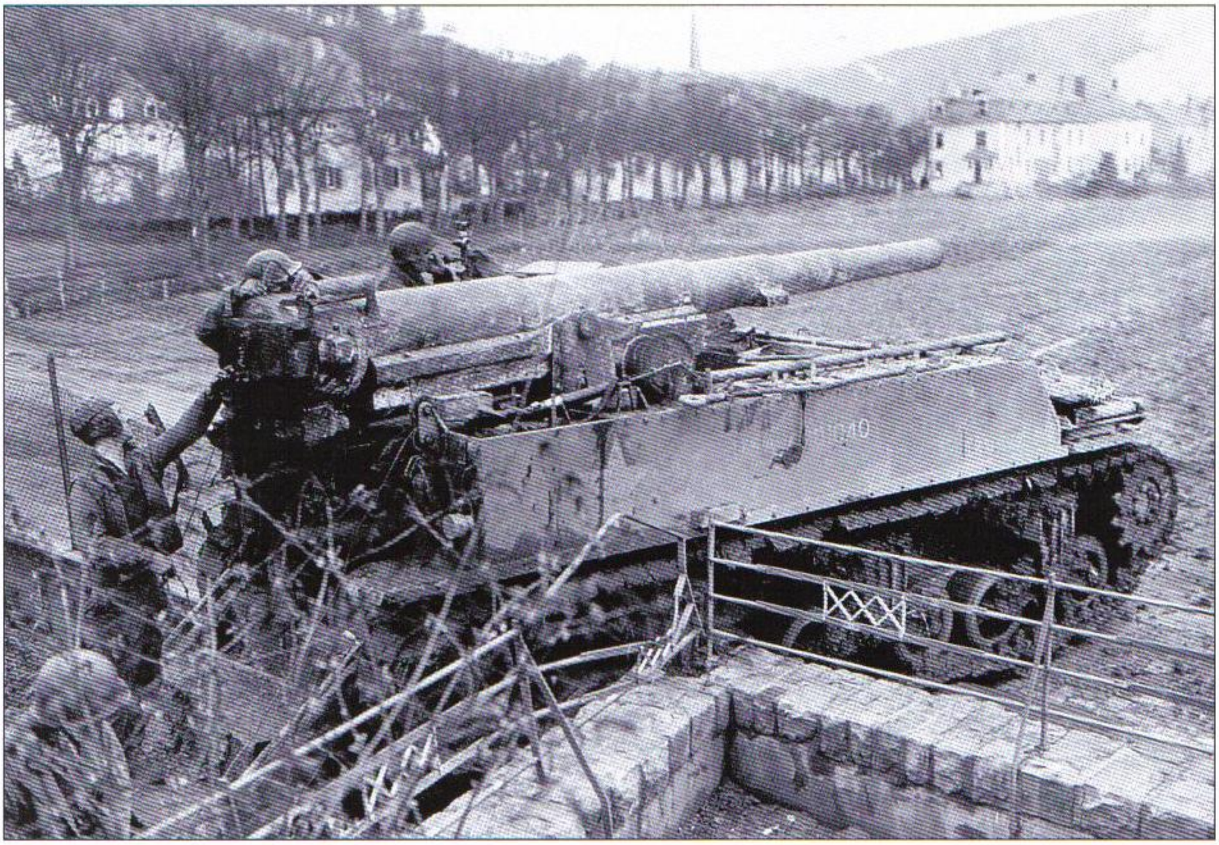
A M8 75mm HMC has its engine replaced by personnel of the 133rd Ordnance Maintenance Battalion near Vaux-les-Rosieres, Belgium on 23 January 1945. The M8 75mm HMC, like the M5A1 light tank on which it was based, was powered by two Cadillac automotive engines.



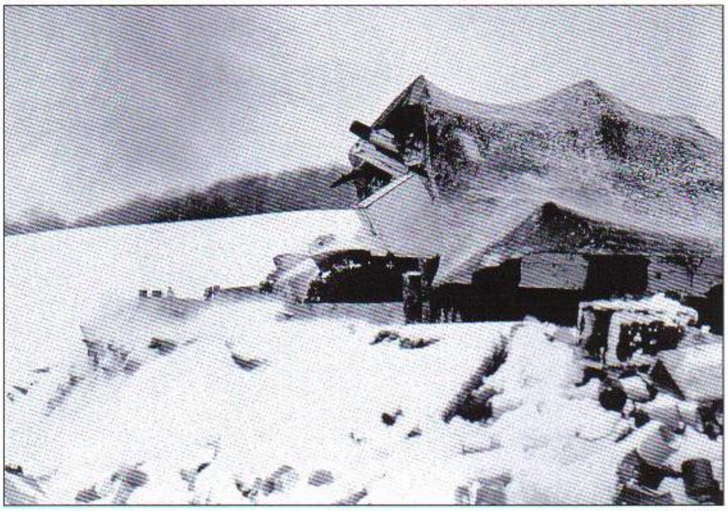
A M7 105mm HMC of the VIII Corps towing a M10 ammunition trailer passes through Bastogne on the way to the Ardennes front on 28 January 1945.



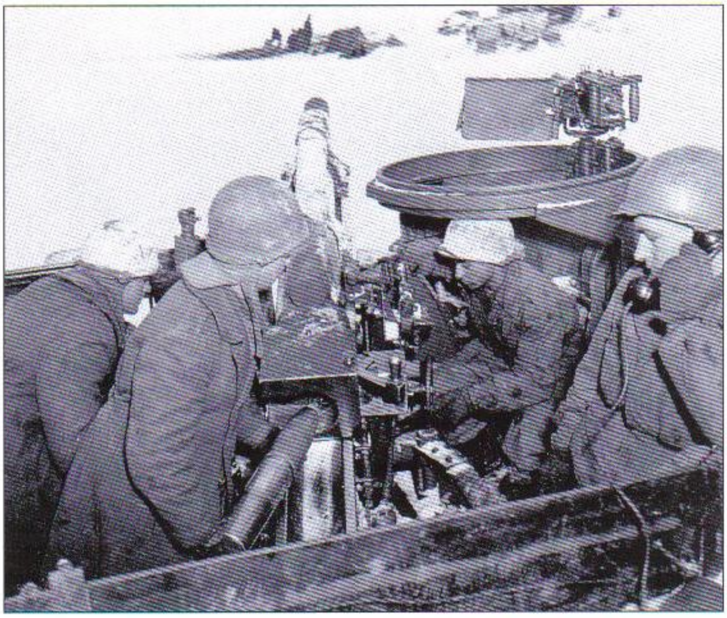
While the US 12th Army Group was involved in the Ardennes in January 1945, the Wehrmacht launched a smaller offensive against the 6th Army Group in Alsace, Operation Nordwind. Besides the US Seventh Army, the 6th Army Group also included the French First Army. This is a M7 105mm HMC of the 62nd RAA, French 1st Armored Division, First French Army during a fire mission in Alsace with an enormous stack of expended fiberboard ammunition tubes nearby.



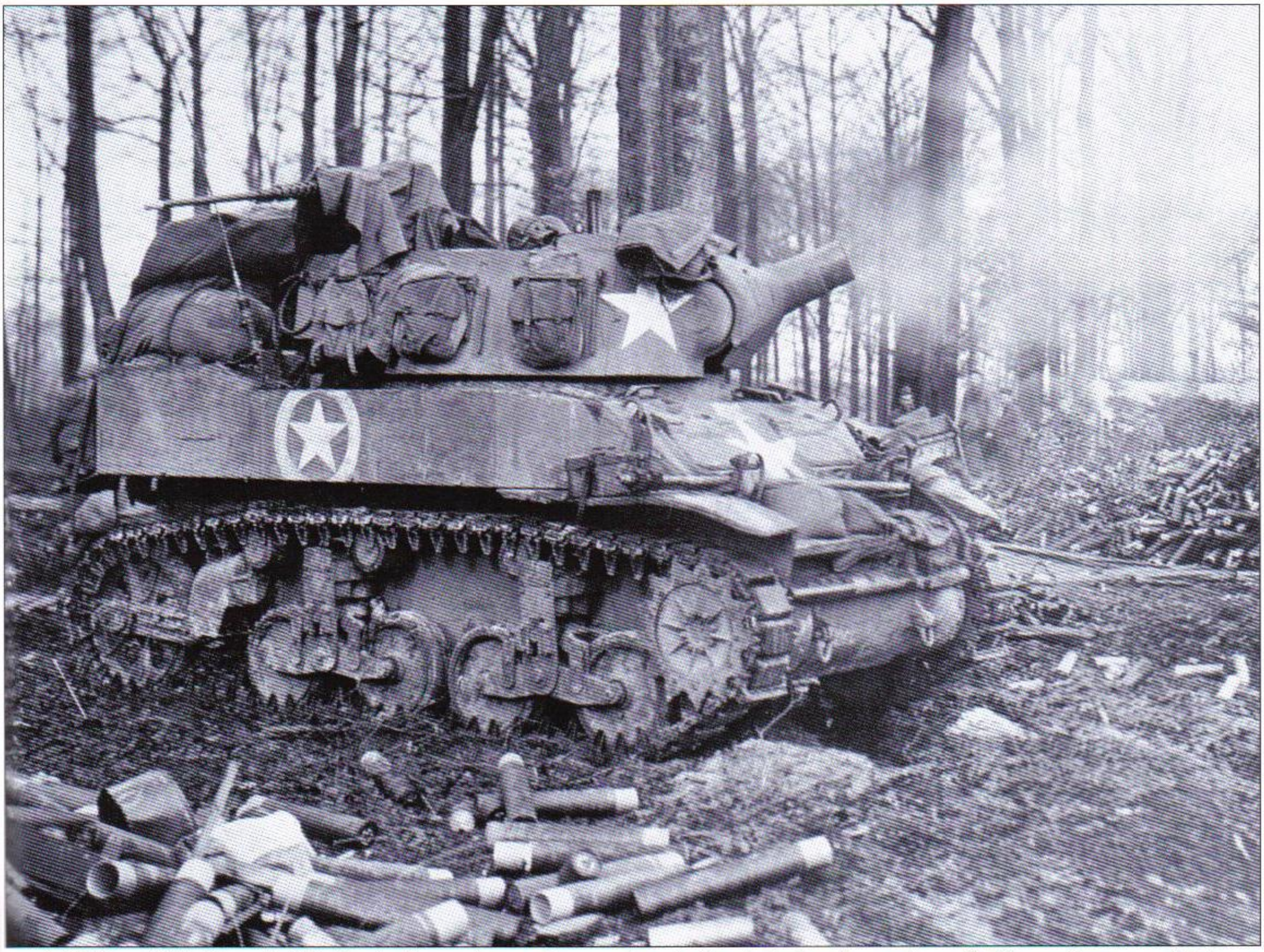
A M12 155mm GMC nicknamed "Choo-Choo-Bam" provides fire support for Patton's Third Army during fighting in Echternath, Luxembourg on 8 February 1945. This vehicle has been fitted with extended end connectors for better operation in mud.



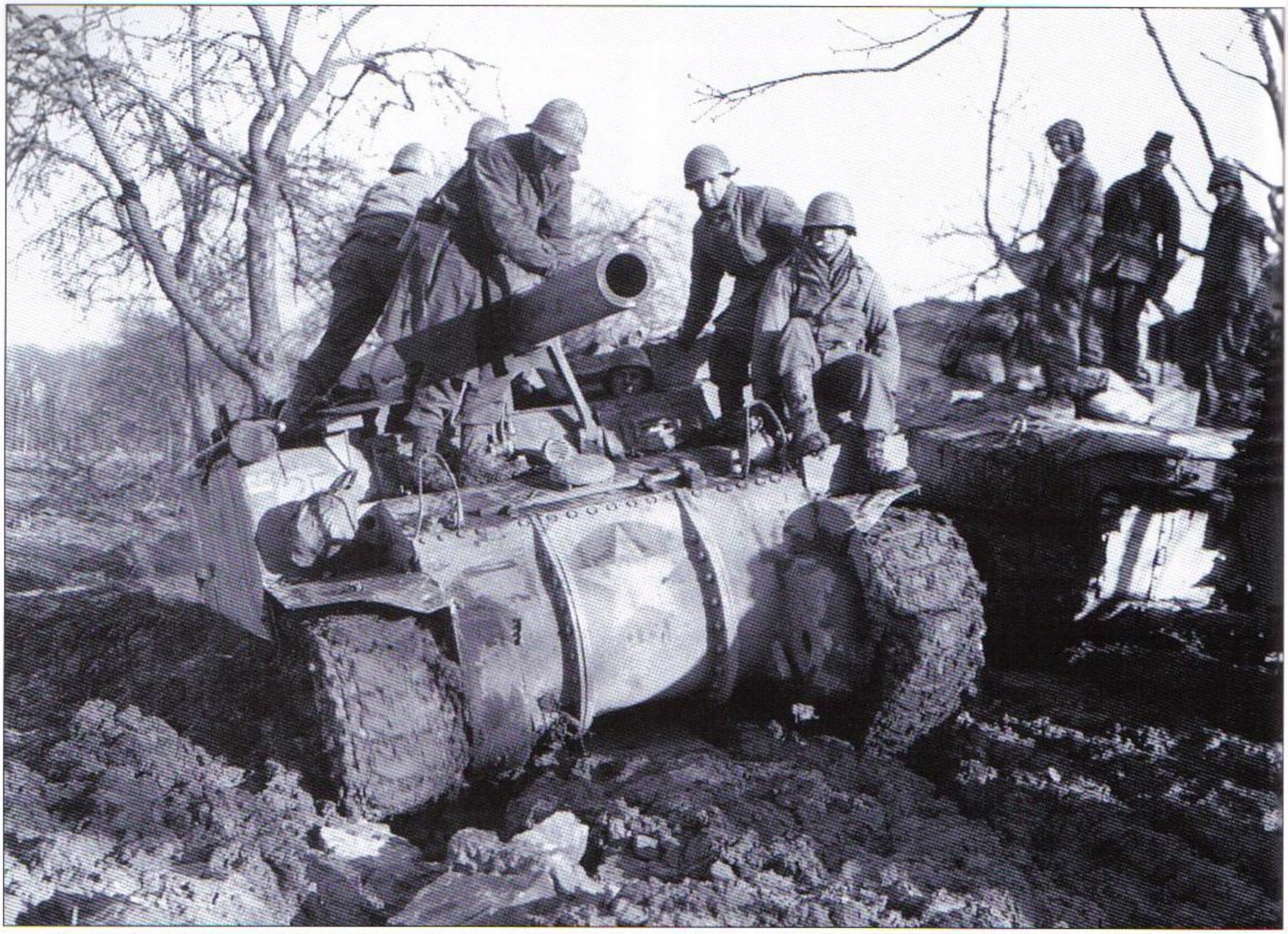
A M7 105mm HMC of the 342nd AFAB opens fire near Ludweiller, Germany on 24 January 1945. This was one of a number of non-divisional field artillery battalions that was converted to self-propelled howitzers in 1943.



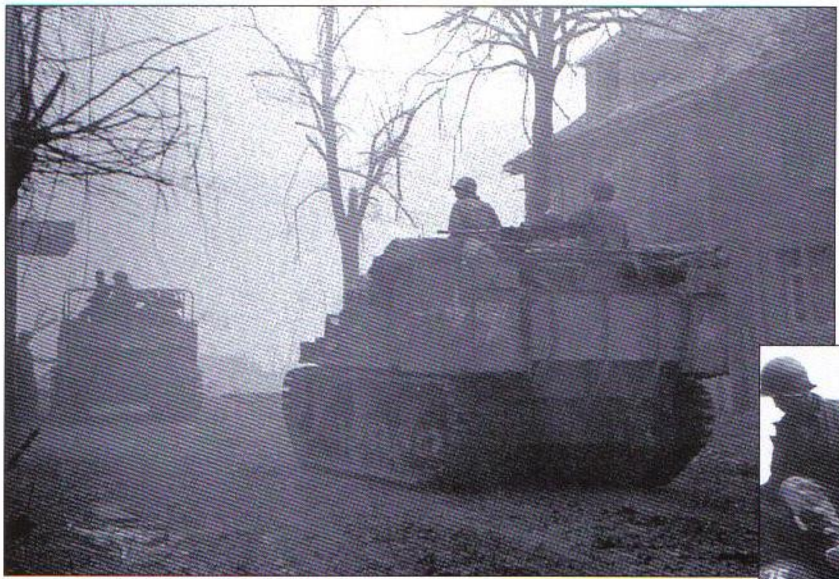
The gun commander waits for orders to fire over his field telephone as the crew loads another round on their M7 105mm HMC during a fire mission by the 398th AFAB, 8th Armored Division near Wochern, Germany on 27 January 1945.



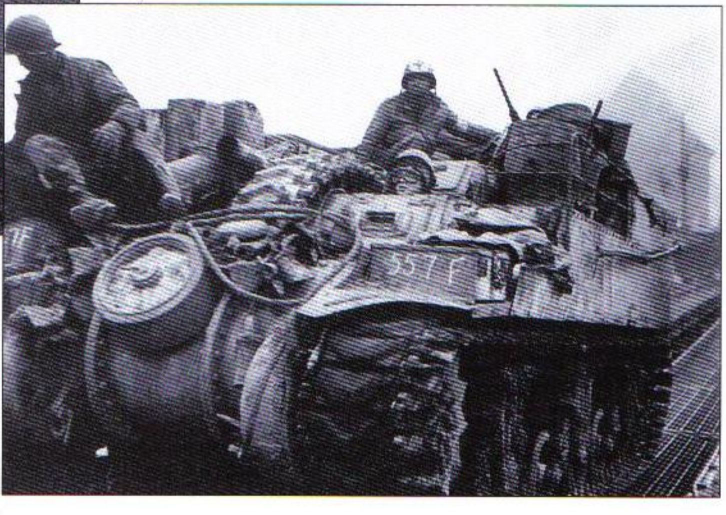
A M8 75mm HMC of Troop E, 106th Cavalry Reconnaissance Group carries out a fire mission from the woods near Karlsbrunn, Germany on 2 February 1945. The tubes in the foreground are fiberboard 75mm ammunition containers.



A M12 155mm GMC slogs through the glutinous mud in Luxembourg on 9 February 1945 while supporting the 5th Infantry Division in its attacks on pillboxes along the Siegfried line.

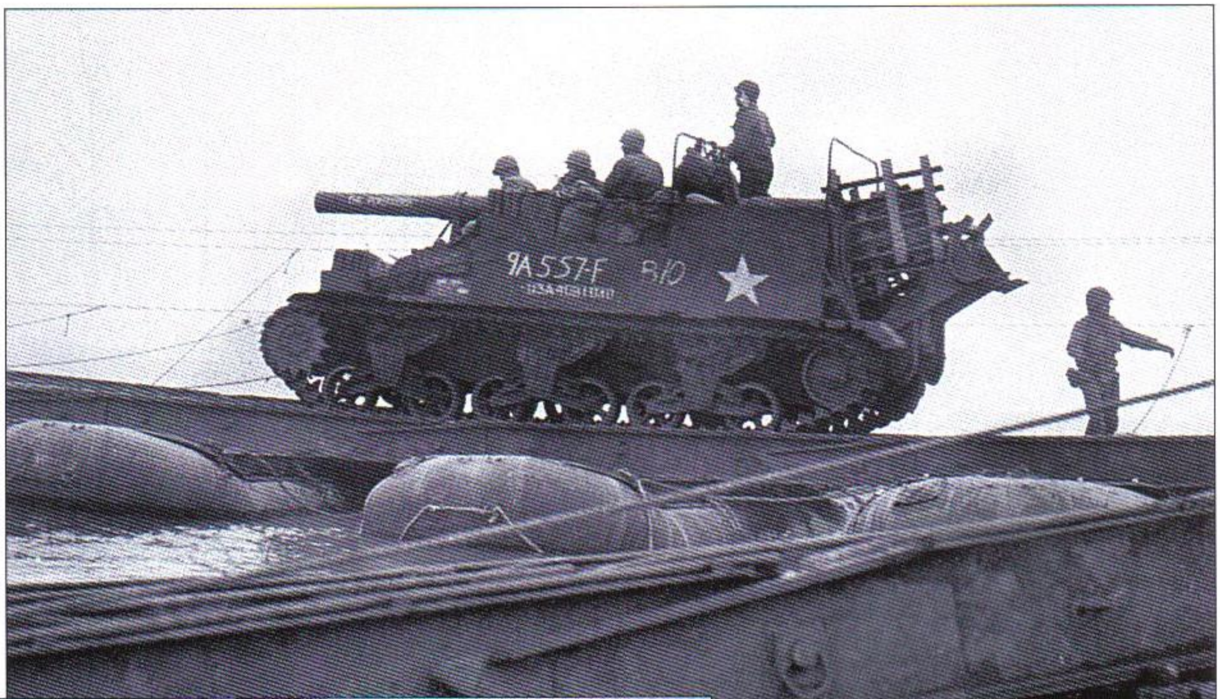


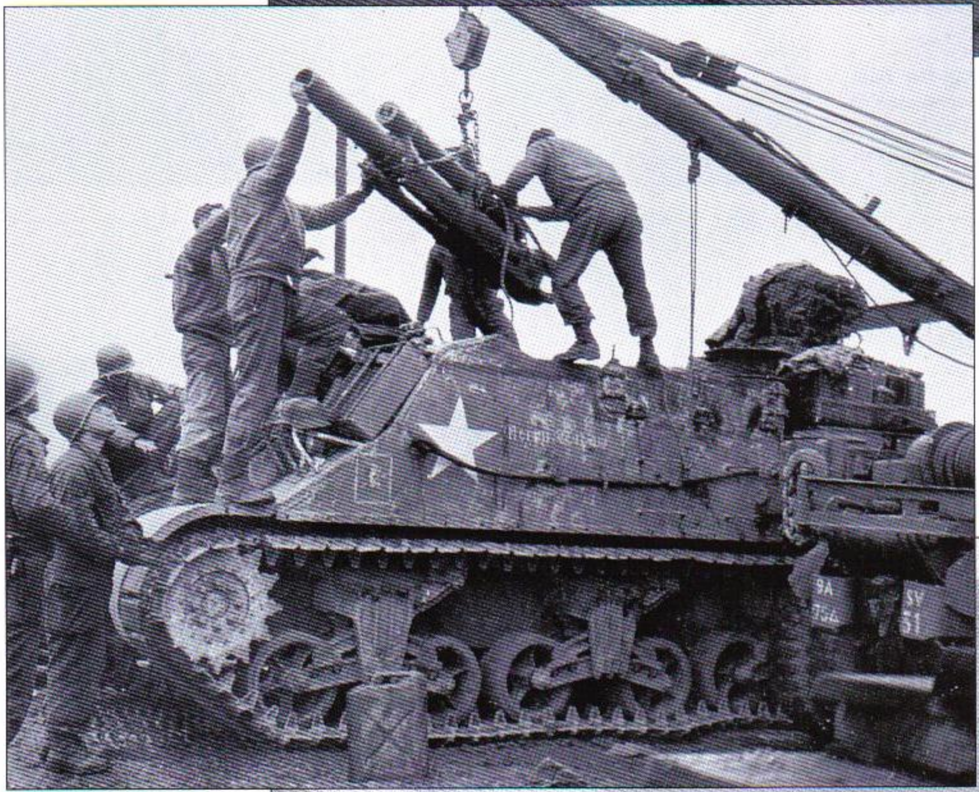
A M30 cargo carrier of the 557th AFAB moves through the fog-shrouded town of Linnich, Germany on the morning of 26 February 1945. This was one of the main crossing points over the Roer river during Operation Grenade. In the foreground to the left is a M12 155mm GMC of the battalion.



A M30 cargo carrier of the 557th AFAB moves over a treadway bridge outside Linnich on 26 February 1945. This unit welded rods along the superstructure for crew stowage. This particular vehicle is fitted with extended end connectors for better mobility in the mud.

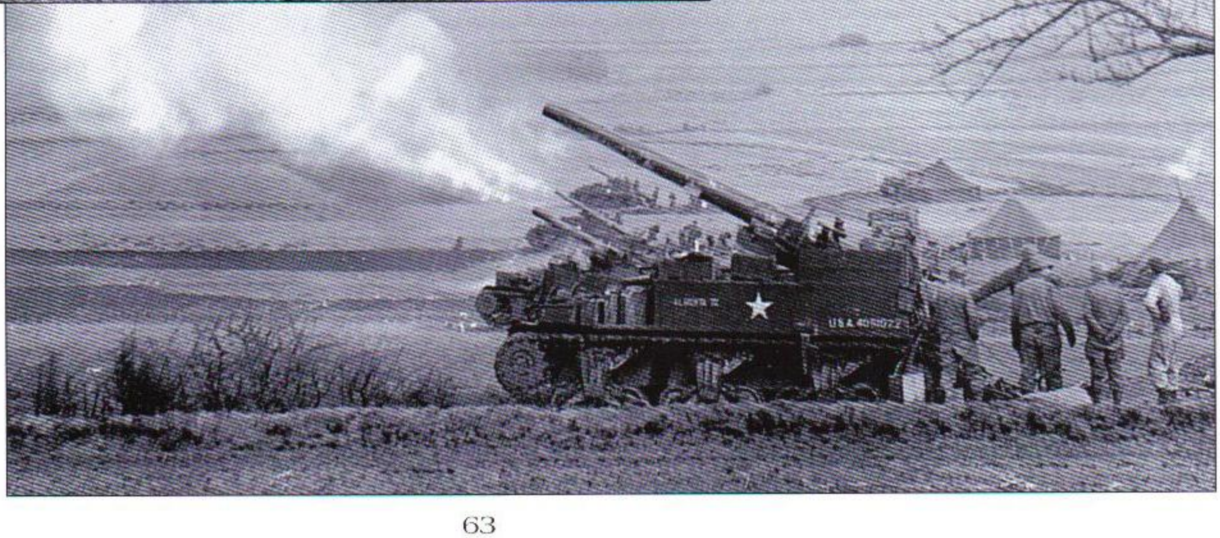
A M12 155mm GMC named "The Persuader" of Battery B, 557th AFAB, 9th Army, moves across a treadway bridge during the fighting near Linnich, Germany on 26 February 1945. The crew has stowed some wood pallets over the entrenching spade, probably for use in crew quarters during the wet winter weather.

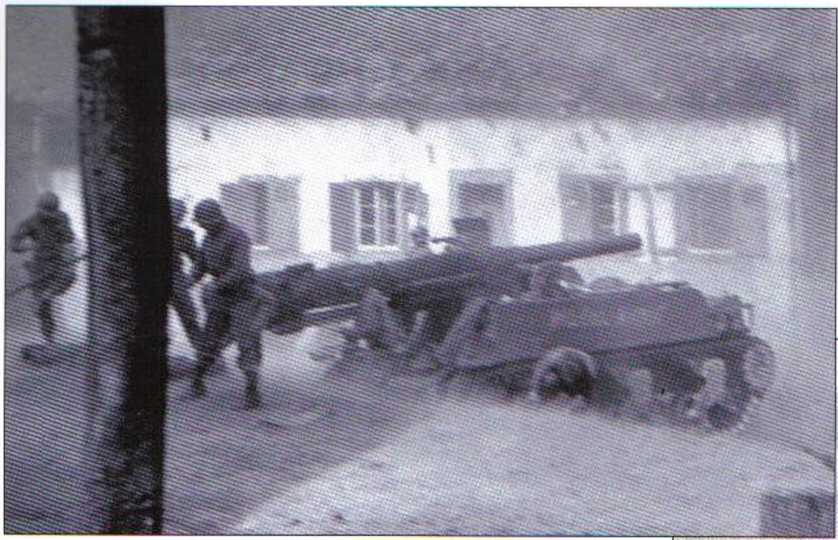




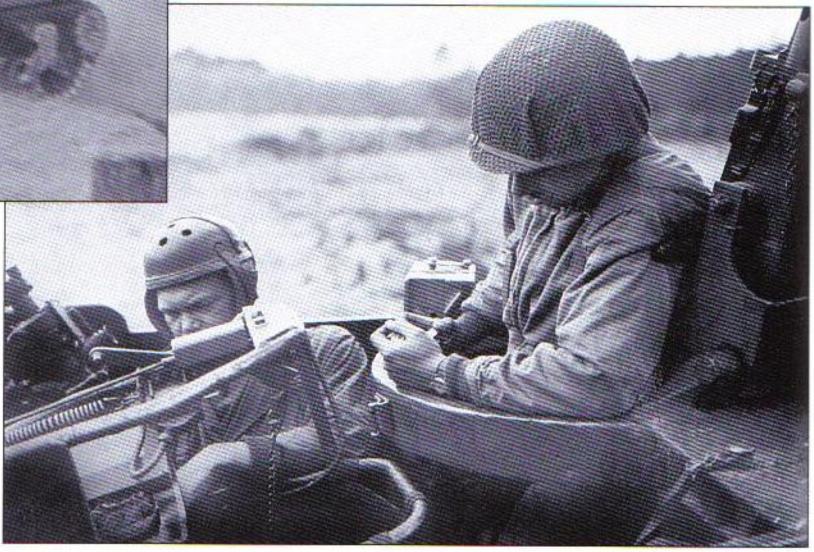
A wrecker truck from the service company of the 275th AFAB lowers the 105mm howitzer of a M7 105mm HMC into place during repair work near Nieukerk on 7 March 1945. This M7 105mm HMC was named the "Merry Widow" and there is a small cartoon that can be seen below and to the left of the star. The vehicle is a late 1944 production type with the improved sponson stowage box and basket. This battalion converted from towed to self-propelled artillery in February 1945, hence the newer version of the M7 105mm HMC.

A battalion of M12 155mm GMC support the 11th Armored Division during the fighting near Budesheim, Germany on 10 March 1945 during attacks along the Rhine river. The vehicle in the foreground is named "Alberta IV".

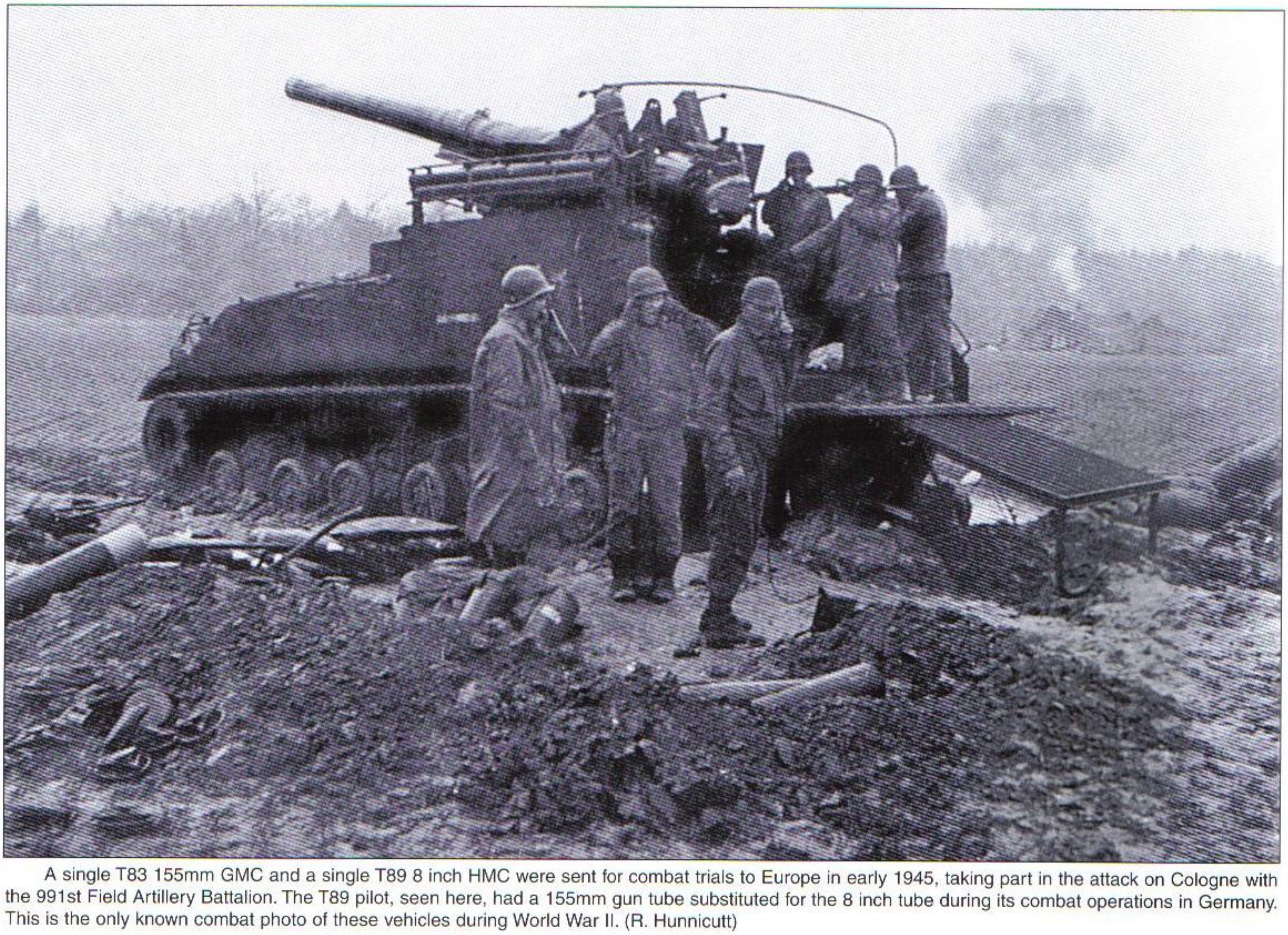




The camera shakes as a M12 155mm GMC named "Pill-Box Annie" fires a target near Seelbach, Germany while supporting the 45th Division of the Seventh Army on 13 March 1945.

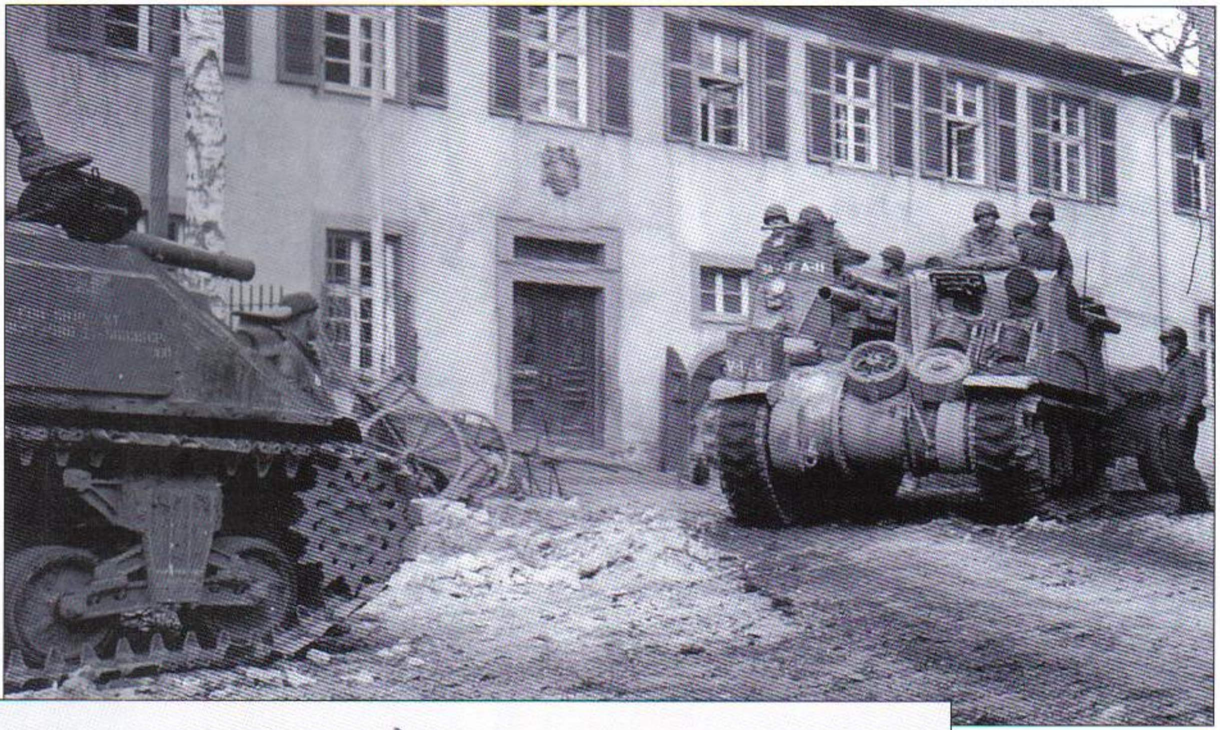


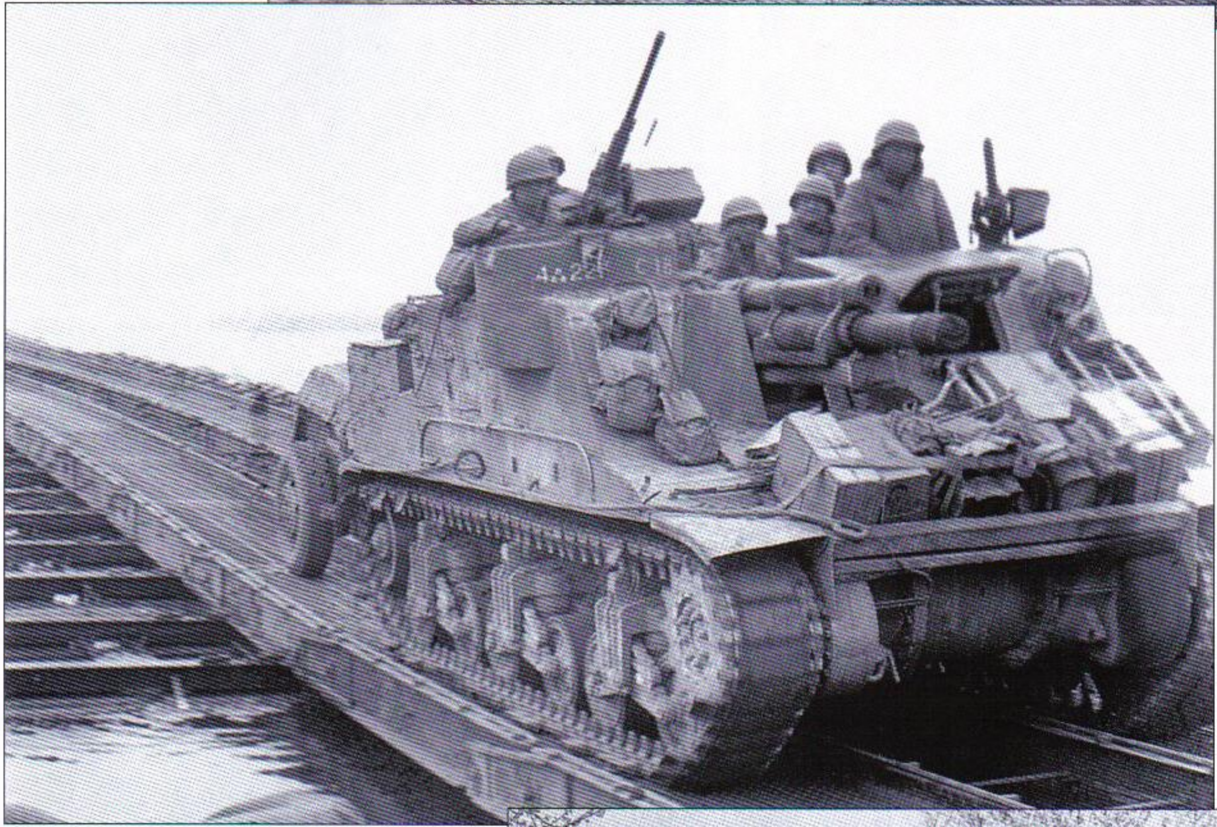
This close-up of a M8 75mm HMC supporting the 66th Division near Blain, France on 24 March 1945 gives some idea of the cramped quarters inside the turret of the vehicle. The frame in the left of the photo is the recoil guard around the 75mm howitzer breech to prevent the crew from being injured when it recoiled.



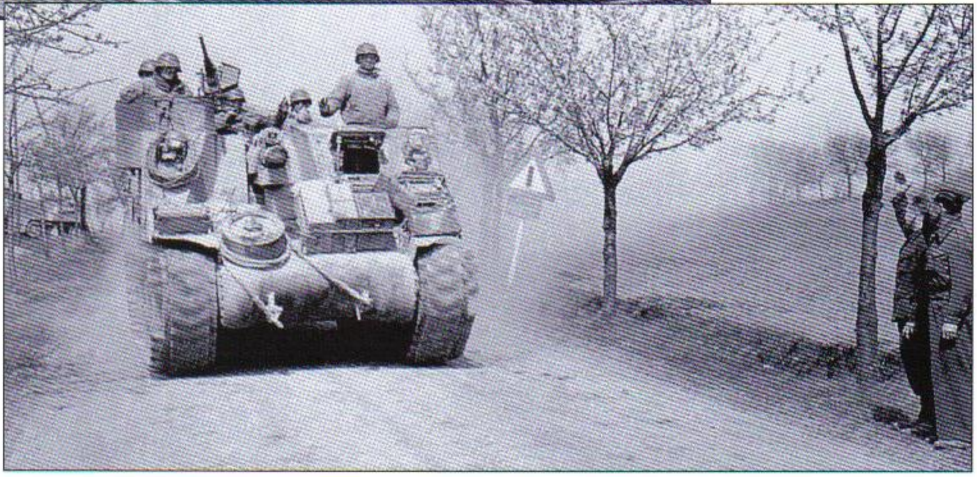
A single T83 155mm GMC and a single T89 8 inch HMC were sent for combat trials to Europe in early 1945, taking part in the attack on Cologne with the 991st Field Artillery Battalion. The T89 pilot, seen here, had a 155mm gun tube substituted for the 8 inch tube during its combat operations in Germany. This is the only known combat photo of these vehicles during World War II. (R. Hunnicutt)

A M7 105mm HMC of Battery A, 73rd AFAB, 9th Armored Division moves through Limburg, Germany on 27 March 1945. This is an intermediate production vehicle with the older D37893 suspension and three piece transmission cover.

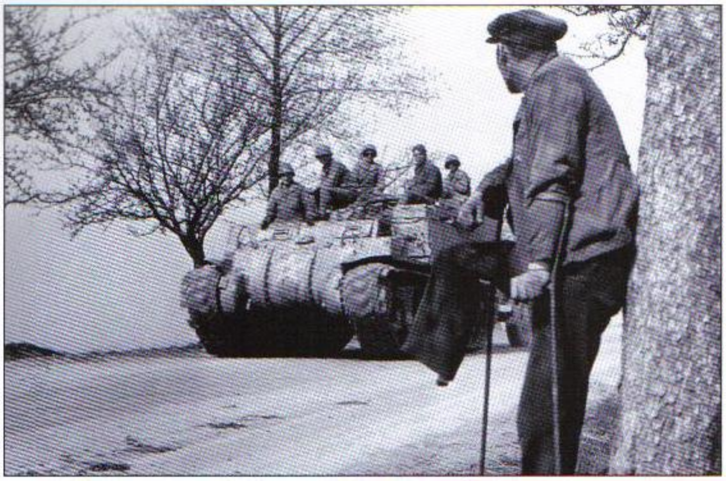




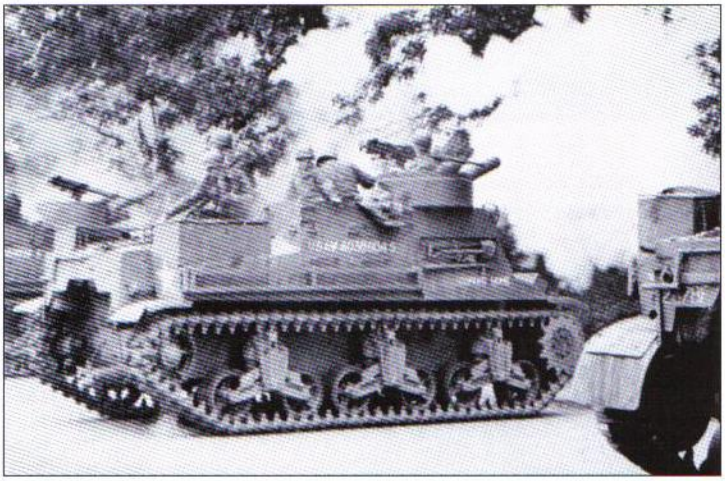
A M7 105mm HMC of Battery C, 22nd AFAB, 4th Armored Division crosses a treadway bridge over the Main river near Hanau, Germany on 28 March 1945. This is a fairly typical example of an intermediate production vehicle with the deepened pulpit and armored flaps, but still retaining the early suspension.



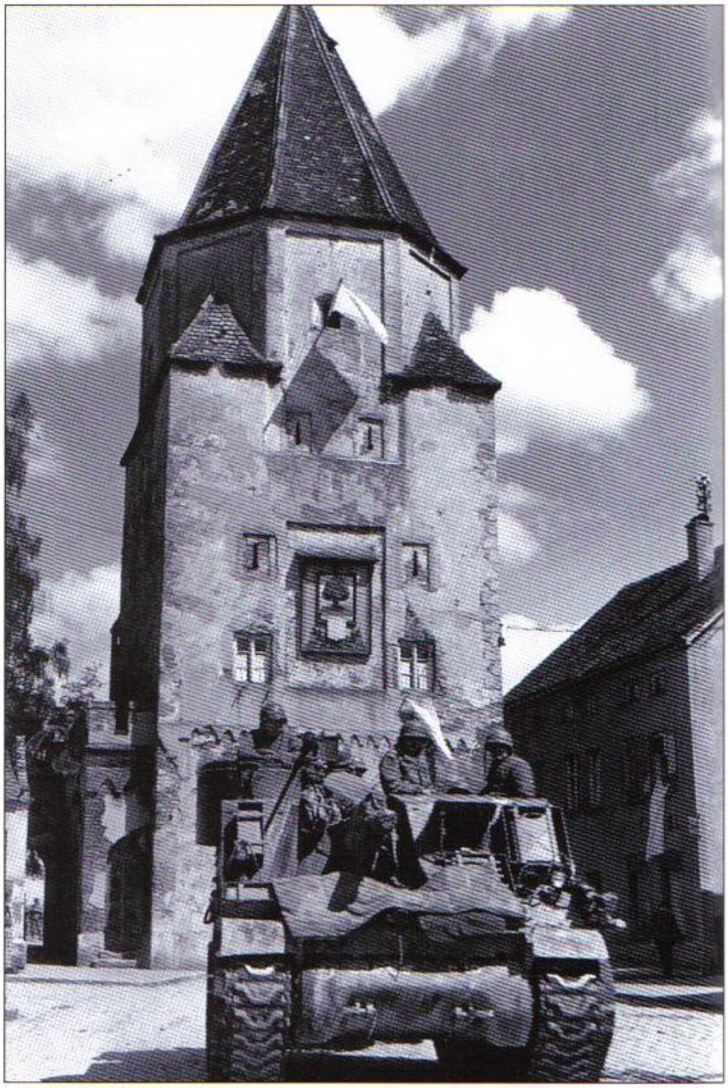
A M7 105mm HMC of one of the armored field artillery battalions of the 9th Armored Division passes by some liberated French POWs near the camp at Kinderbrouck, Germany on 12 April 1945. This is an intermediate production type with the E4188 one-piece transmission cover.



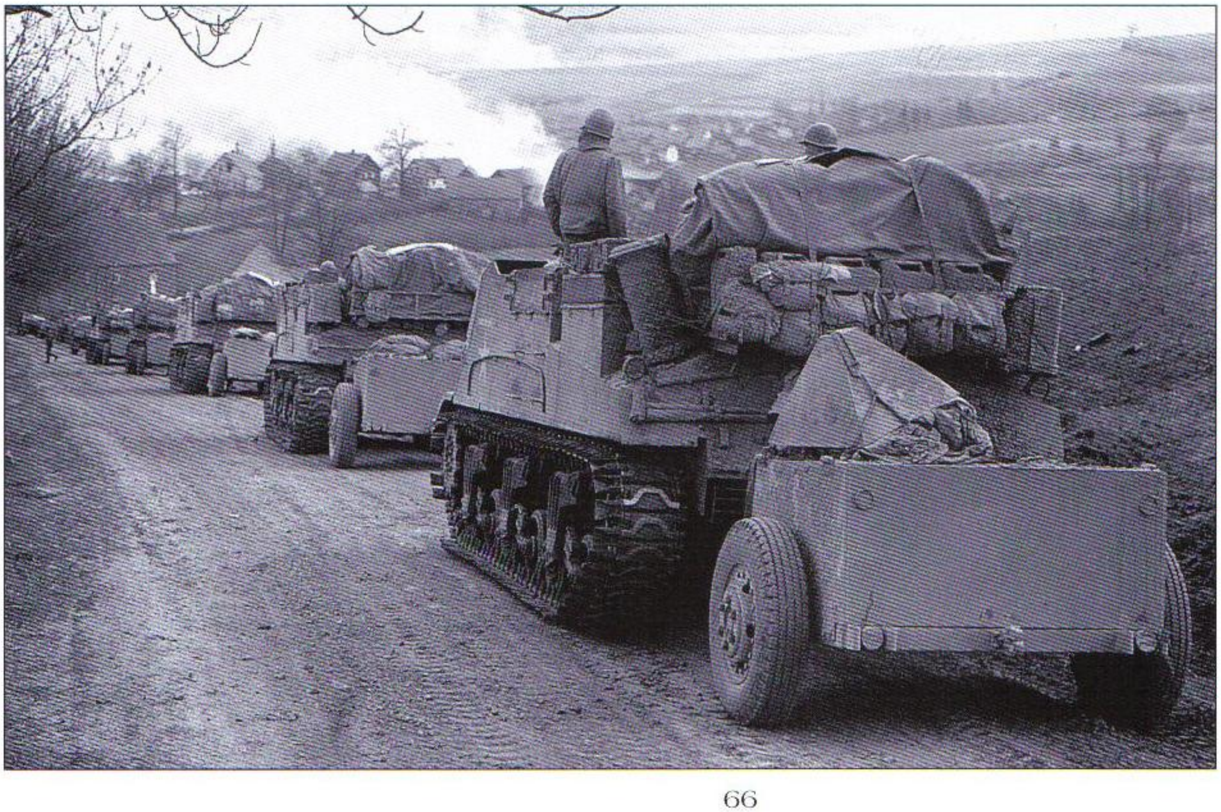
A M30 cargo carrier from a M12 155mm GMC battalion passes by a one-legged German World War I veteran near Westerengel, Germany on 12 April 1945.



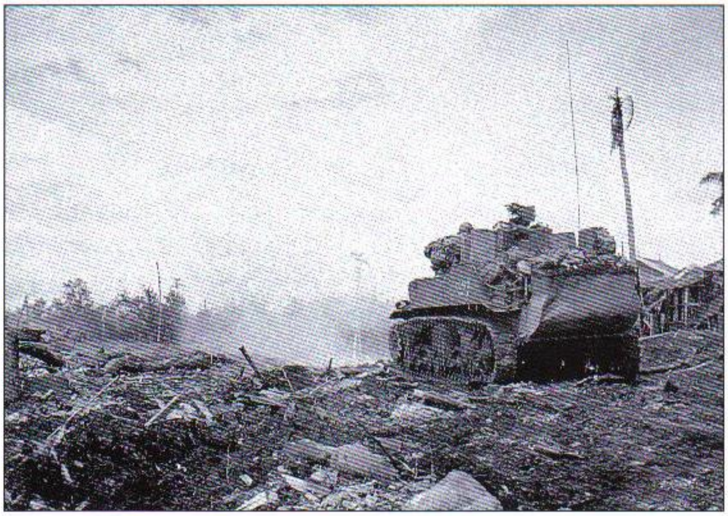
A M7 105mm HMC of the 2nd Armored Division on occupation duty in Germany shortly after the end of the war in 1945, nicknamed, appropriately enough "Coming Home". This is an intermediate production vehicle with evidence of many field mods such as the typical 2nd Armored Division racks on the rear hull sides.



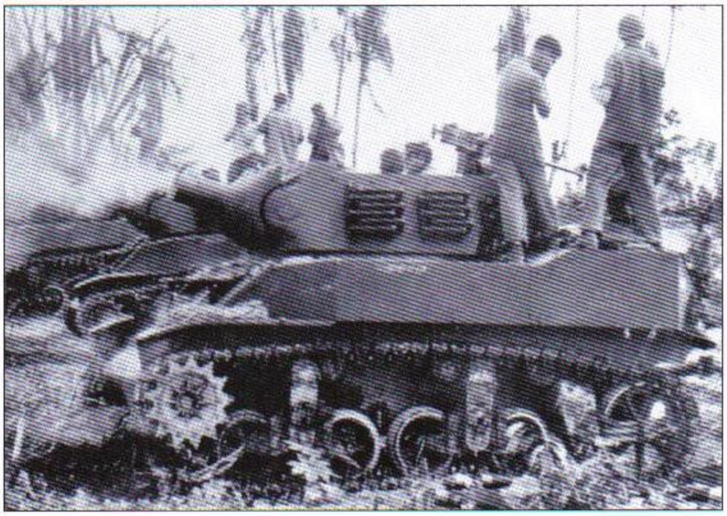
A M7 105mm HMC from Battery C, 414th AFAB, 20th Armored Division pass in front of the town clock tower in Aichach near Munich on 29 April 1945 with white surrender flags evident from several windows. This is a late production M7 105mm HMC with the E8546 transmission cover.



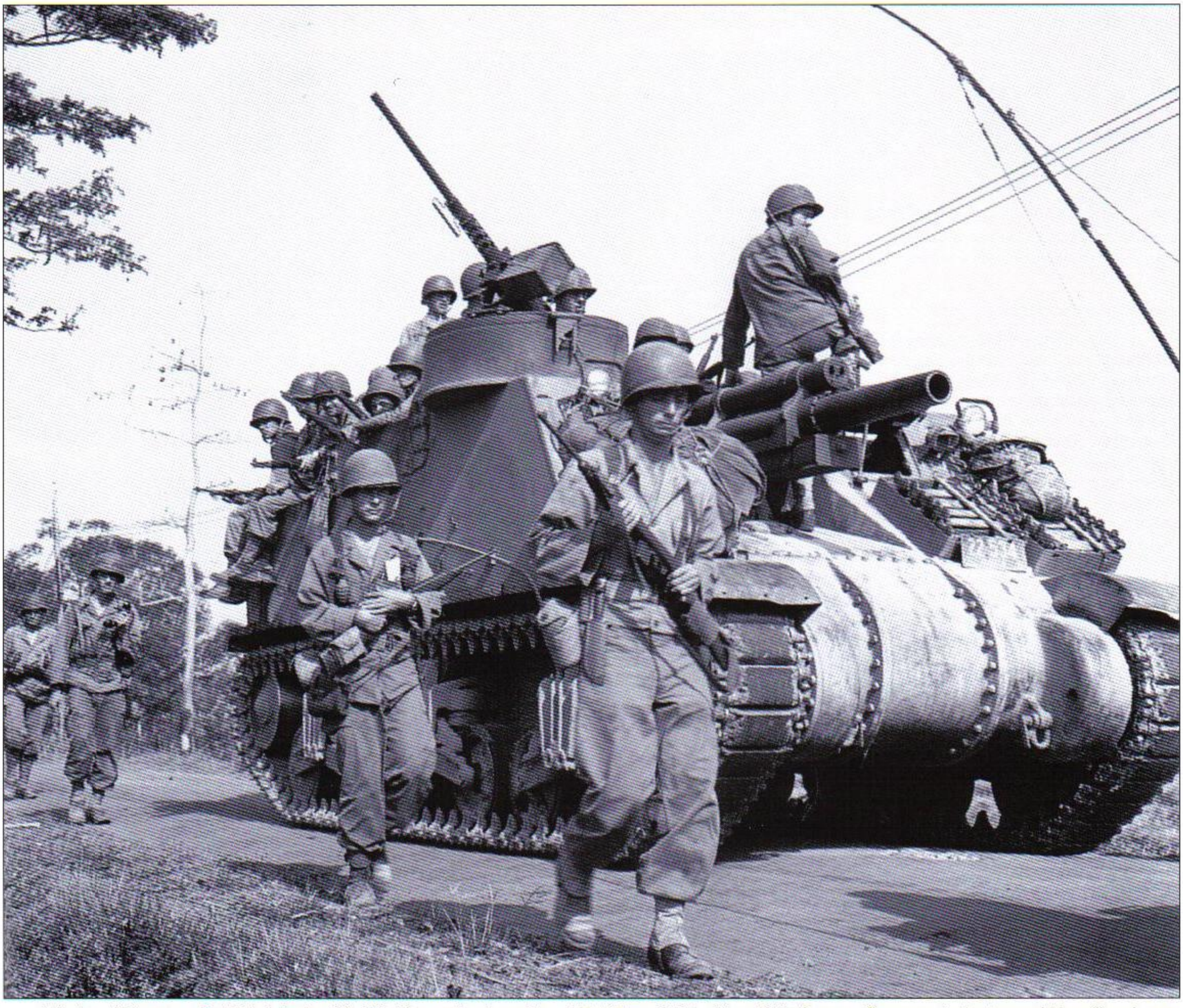
A rare view of a column of M7B1 105mm HMC 105mm HMC moving towards a burning German town in April 1945. The M7B1 can be distinguished by the longer hull sides and by the rear plate, and few appear to have been deployed in Europe. They are fitted with duckbill extended end connectors, and are towing M8 armored ammunition trailers.



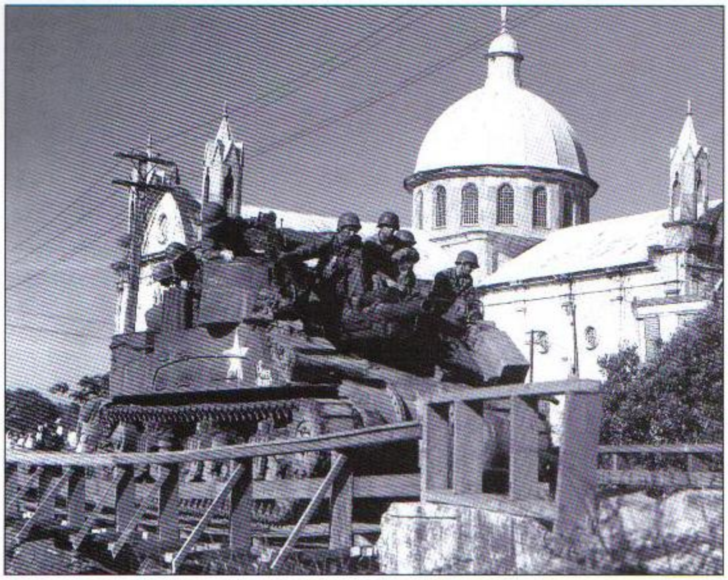
A M8 75mm HMC, still fitted with wading trunks, fires on a Japanese position at Ormoc in the Philippines on 7 February 1945. In the Pacific, these vehicles were used mainly by infantry regiment cannon companies.



A battery of M8 75mm HMC of an infantry cannon company conducts a fire mission during the fighting in the Philippines in 1945.

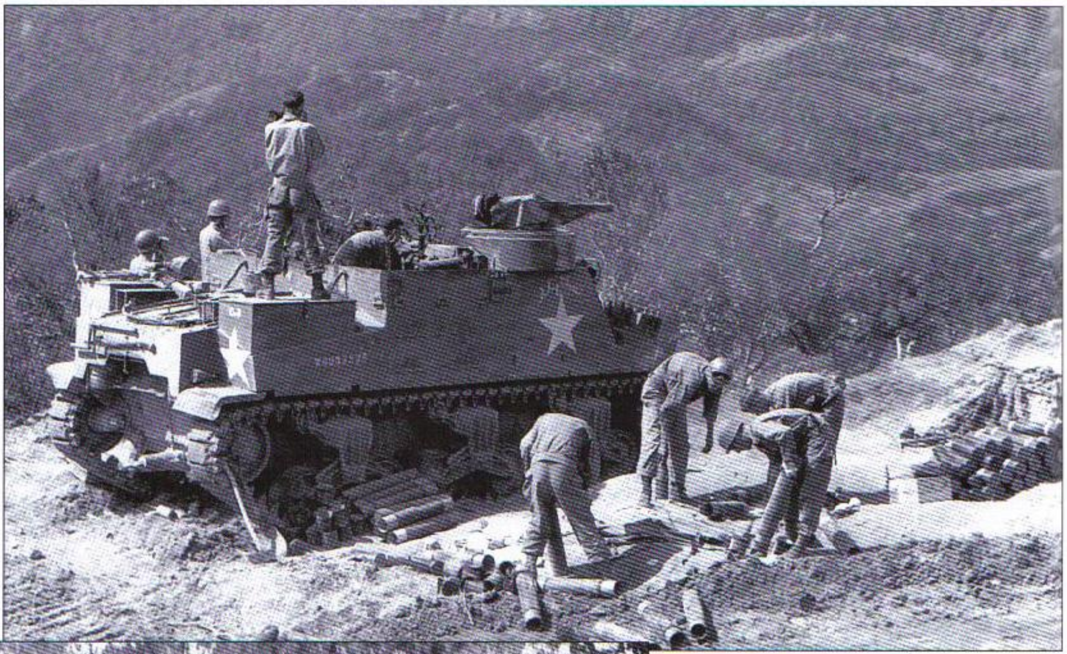


Infantry of Company F, 130th Infantry, 33rd Division walk alongside a M7 105mm HMC of the 130th Cannon Company in the town of Maguilian, Luzon in the Philippines on 23 March 1945. This is from the late 1942 production run.

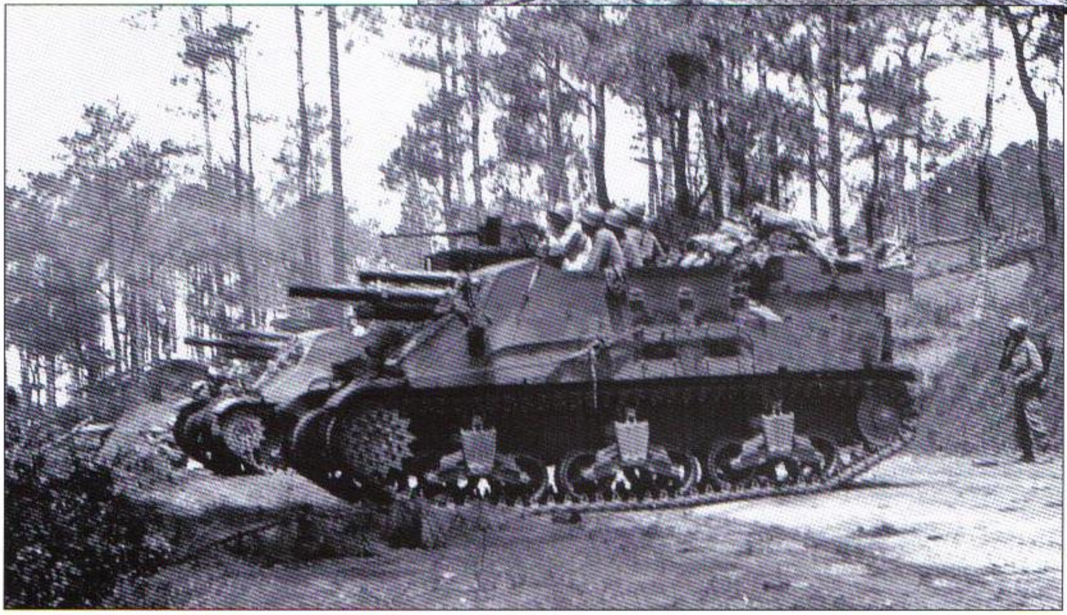


A M7 105mm HMC nicknamed "Super Rabbit" supporting the 40th Division drives through Panay in the Philippines on 18 March 1945. The vehicle is from the transition period of production in December 1942-January 1943 with the deepened pulpit but lacking the armored side flaps. The Signal Corps photographer, Lt. Robert Fields, who took this picture was killed in action shortly after it was taken.

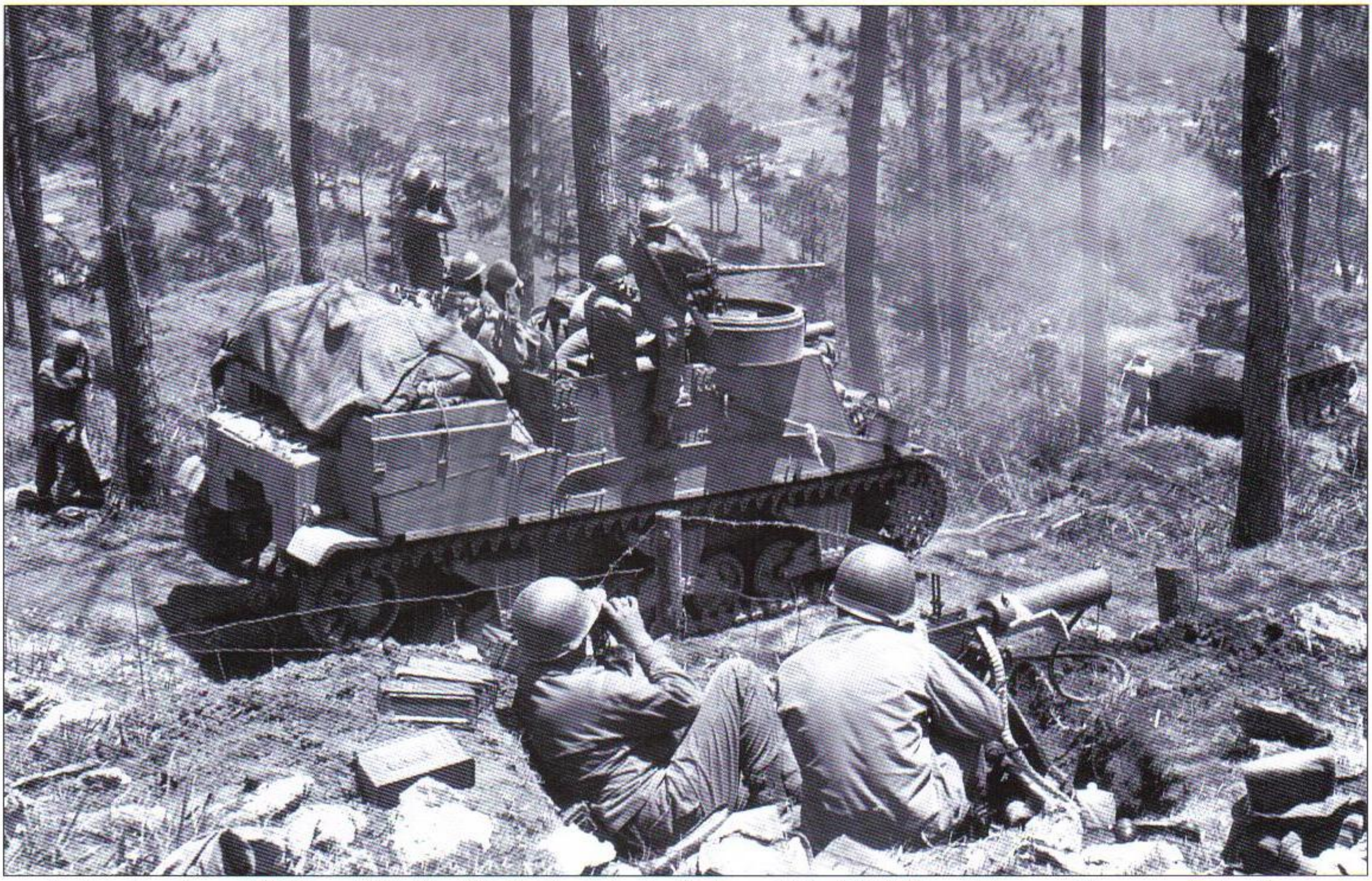
A M7 105mm HMC of the 63rd Cannon Company, 6th Infantry Division has slid down a forested embankment in the hills east of Manila in the Philippines during the fighting there on 24 April 1945 and is being winched out.



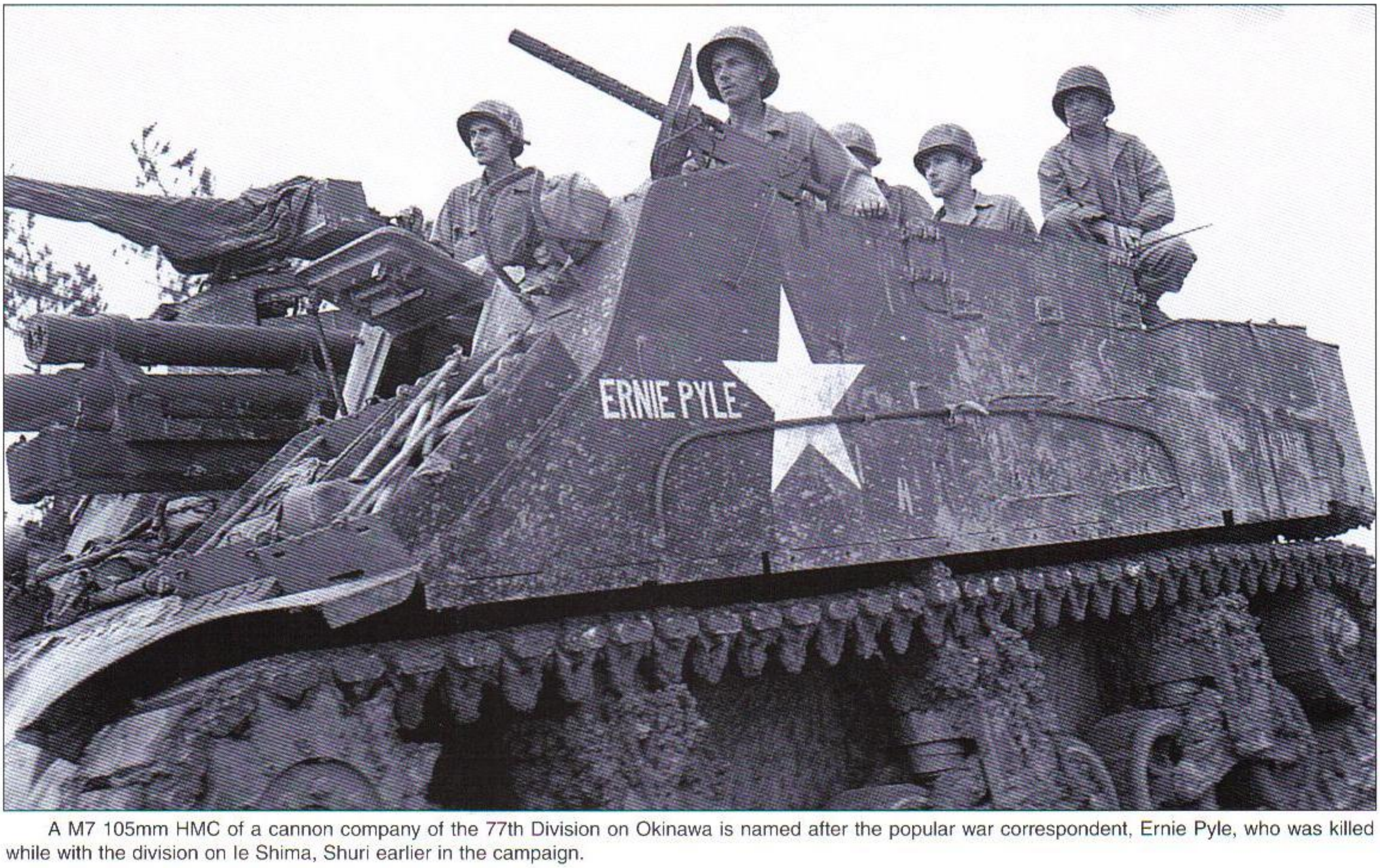
A M7 105mm HMC nicknamed "Shiftless" of the 126th Cannon Company, 32nd Division fires on Japanese positions on the Villa Verde trail on Luzon in the Philippines on 12 April 1945. This vehicle is from the intermediate production run with the heavy duty vertical volute suspension and the armored flaps around the rear of the fighting compartment.



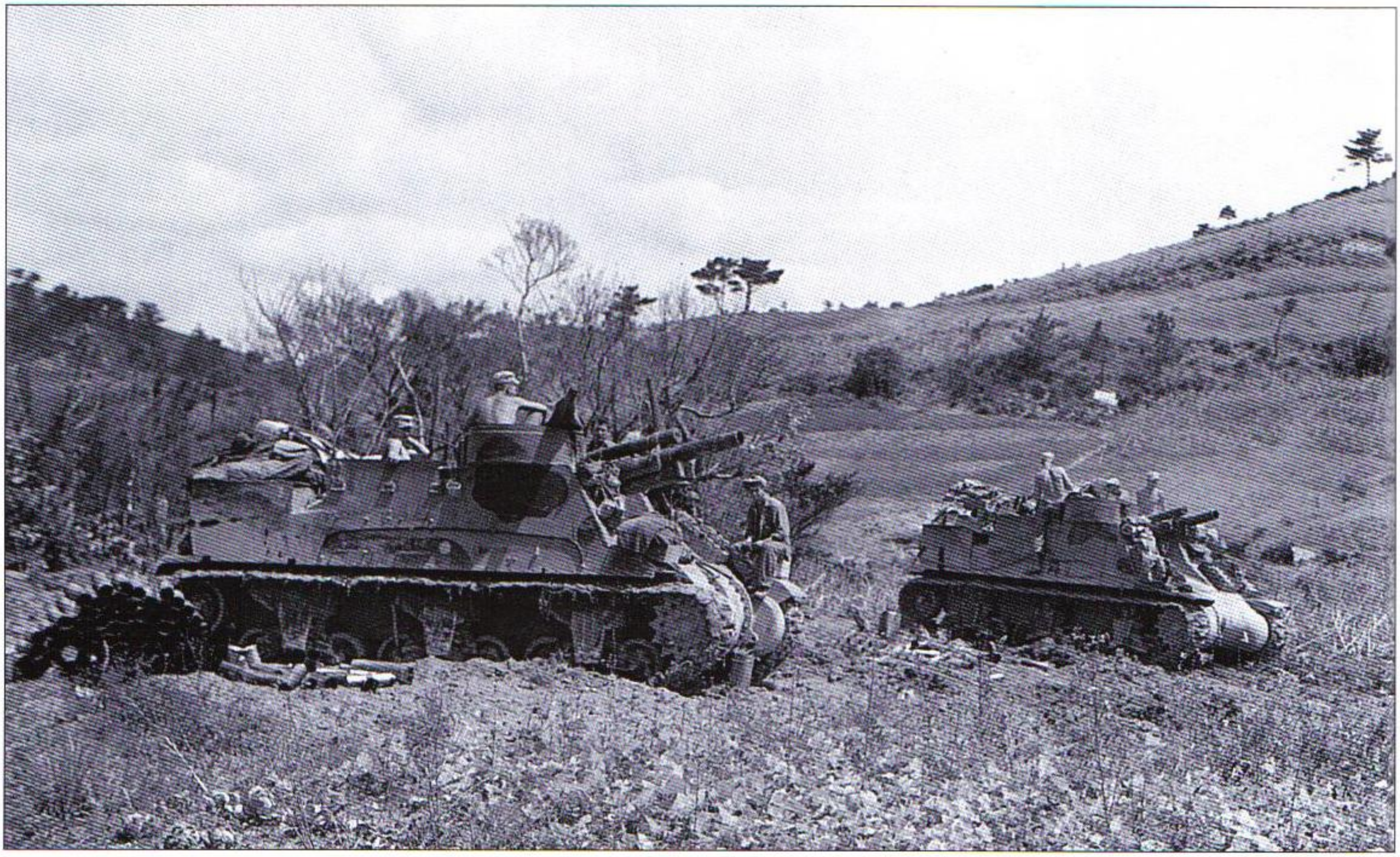
A group of M7 105mm HMC from cannon companies of the 37th Division support the 637th Tank Destroyer Battalion during the fighting on the Queson hills overlooking Baguio on Luzon in the Philippines on 26 April 1945. These are early 1942 production M7 105mm HMC with the side opening stowage bins that have been rebuilt with later features such as the side armored flap.



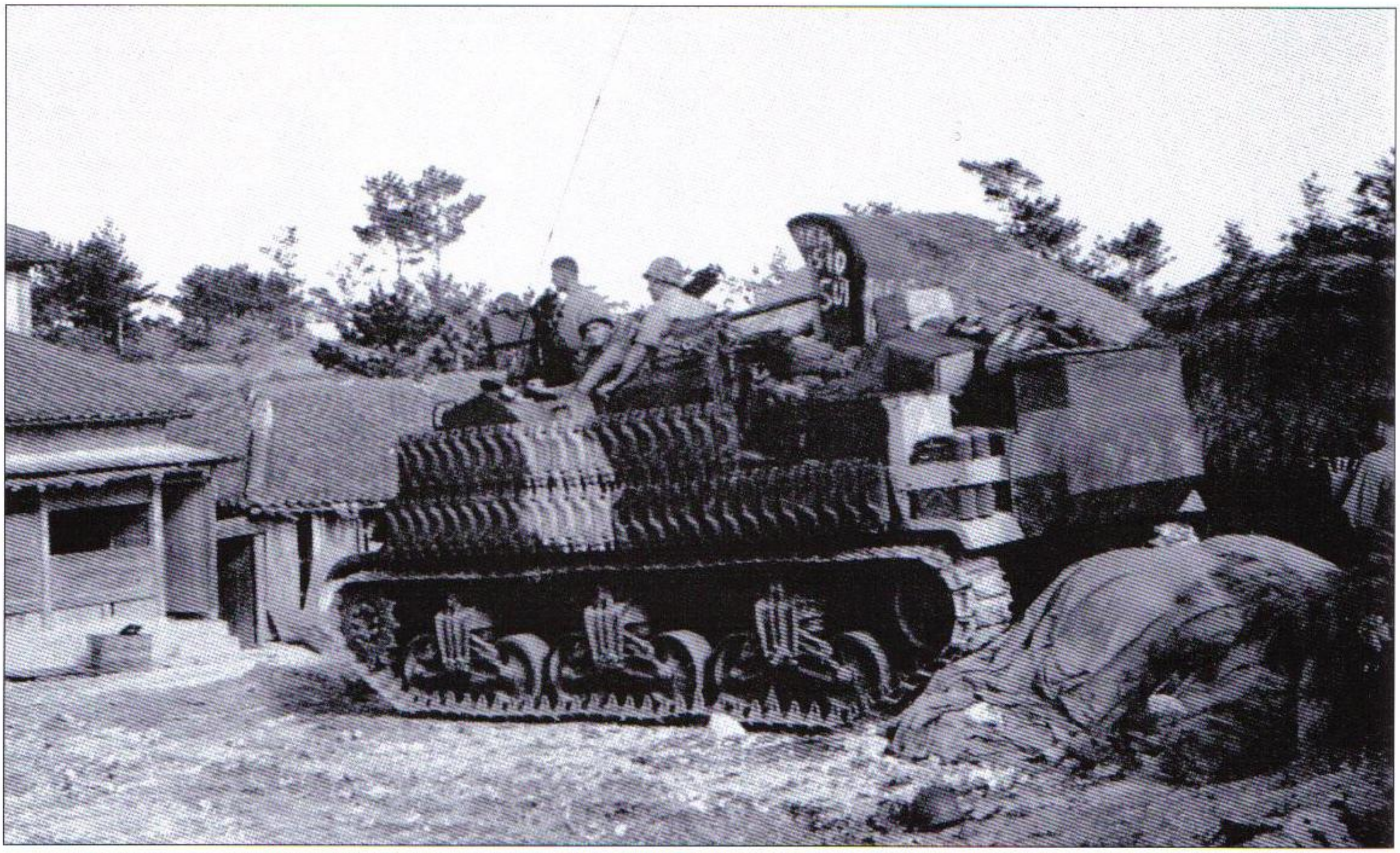
Another view of some M7 105mm HMC of the 37th Division during the fighting on 26 April 1945. The vehicle nearest the camera is from the summer 1942 production run but has been rebuilt with later features including the heavy duty vertical volute suspension and the armored flaps around the rear of the fighting compartment. One of the M18 76mm GMC of the 637th Tank Destroyer Battalion can be seen to the right.



A M7 105mm HMC of a cannon company of the 77th Division on Okinawa is named after the popular war correspondent, Ernie Pyle, who was killed while with the division on Ie Shima, Shuri earlier in the campaign.

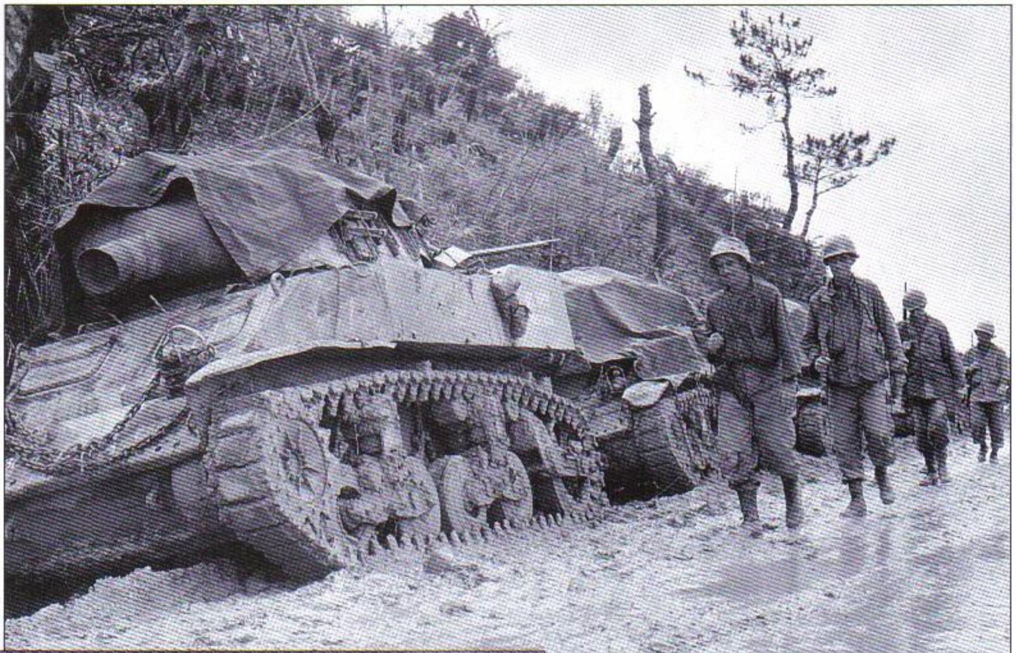


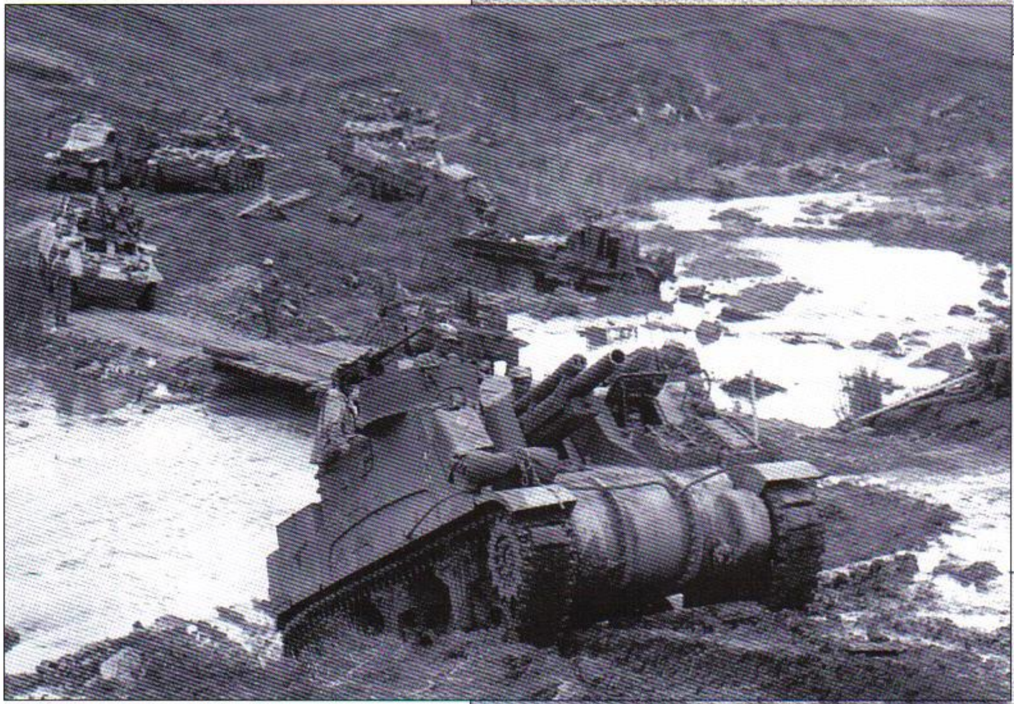
A pair of M7 105mm HMC of the Special Weapons Company of the 22nd Marines shell Japanese positions on the Oroku peninsula during the fighting on Okinawa on 11 June 1945. The M7 105mm HMC began to replace the M3 75mm GMC in 1945 in most Marine units. The vehicle in the foreground is an intermediate production vehicle from the December 1942-January 1943 production run with the shallow pulpit and the armored side flaps. (USMC)



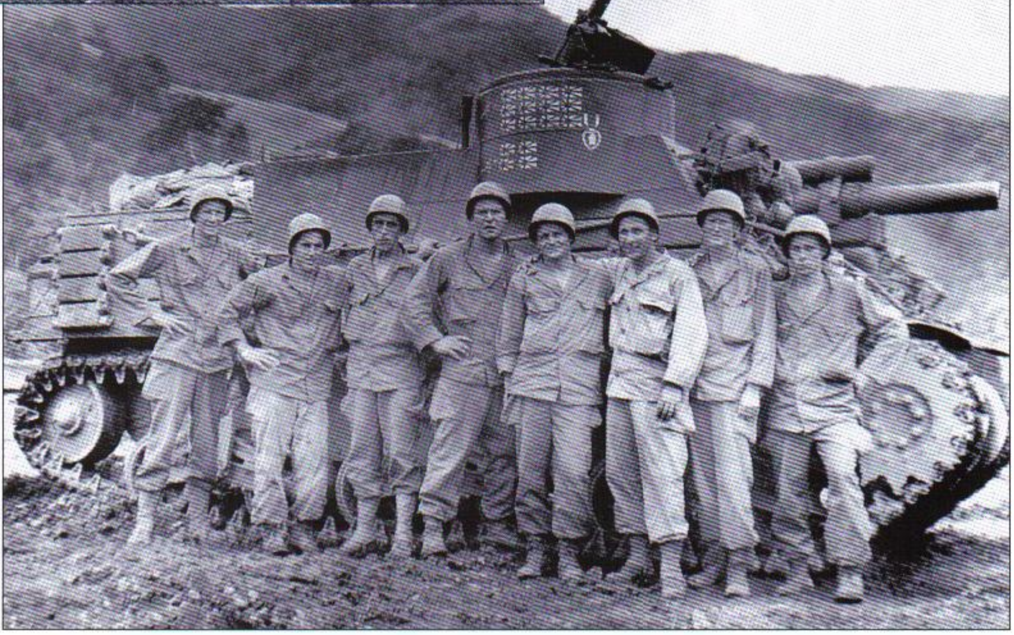
A M7 105mm HMC of the 1st Marine Division on Okinawa in June 1945 with a heavy layer of spare track to provide added protection against Japanese anti-tank weapons. Marine special weapons companies were often used in direct fire missions, making their vehicles more exposed to hostile fire than normal indirect field artillery missions. This led to a need for heavier protection for these vehicles. (USMC)

Infantry pass by a pair of M8 75mm HMC idle by a roadside during the fighting on Okinawa. The vehicles have tarps over their open turret roofs to shield the interior from the rain.

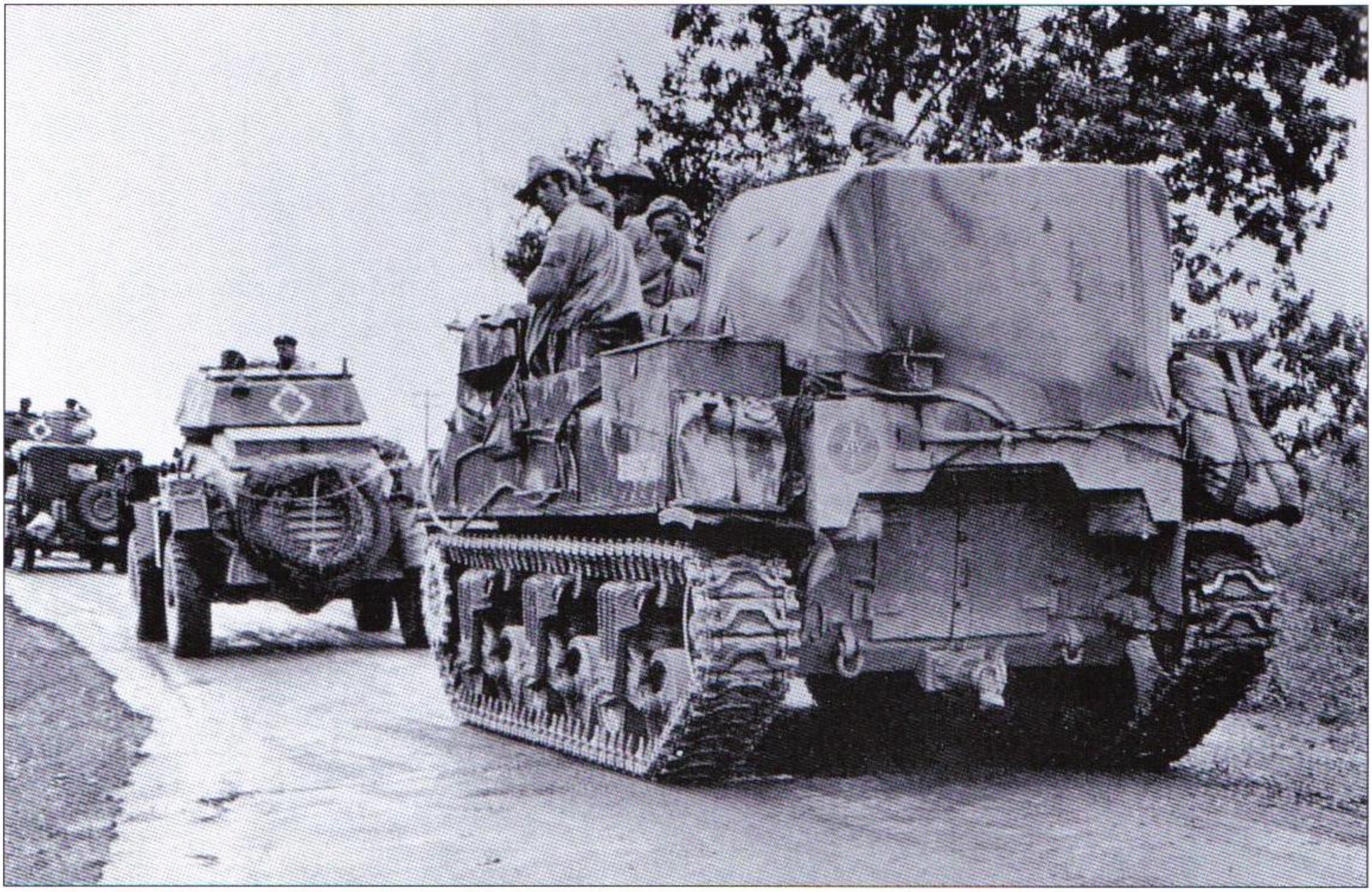




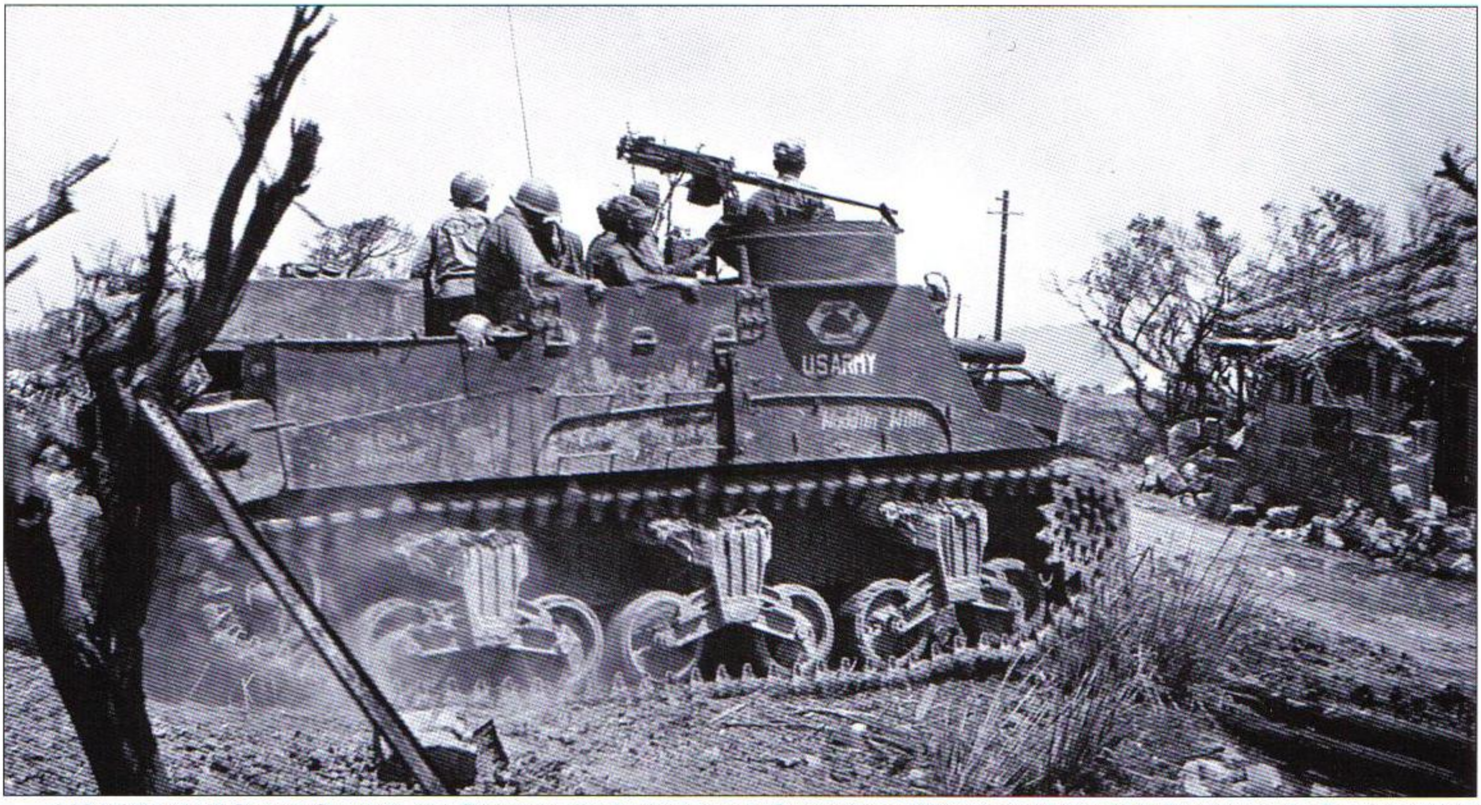
A M7 105mm HMC of the 37th Division leads a column from the 637th Tank Destroyer Battalion across the Magot River on Luzon in the Philippines during the fighting there on 12 June 1945. Knocked out Japanese vehicles litter the crossing site.



The crew of "Old Sarge", a M7 105mm HMC of a cannon company of the 25th Division, pose in front of their vehicle after 162 consecutive days of combat on 29 June 1945 in Luzon, the Philippines. This vehicle was credited with knocking out 12 Japanese tanks and four artillery pieces, the highest score being seven tanks in one day during the fighting for the Caraballo mountains in northern Luzon.



Although the British army had largely abandoned the Priest for the Sexton in northwest Europe, Priests continued to be used in other theaters, including Burma. In April 1945, the British Fourteenth Army closed in on the capital of Burma, Rangoon. Here, a British armored column is seen outside Rangoon in May 1945 with a Priest in the van. It caries the insignia of the Fourteenth Army, a red disc with a white dagger, bisected by a black band with the army number in the Roman XIV format. This is an intermediate production M7 with the armored ammo rack flaps. (NARA)



A M7 of the 383rd Cannon Company, 96th Division during the fighting near Conical hill on Okinawa on 25 May 1945. This is from the December 1942 production batch with the armored flaps but prior to the deepening of the machine gun pulpit. This vehicle is named "Waddlin' Willie" and there is a cartoon above the US Army stencil of a helmeted turtle with a cannon on his back.

9A557-F 510